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=> FILE BIOSIS, CABA, CAPLUS, EMBASE, JAPIO, LIFESCI, MEDLINE, SCISEARCH, USPATFULL
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E1
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E12
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L1.
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YOU HAVE REQUESTED DATA FROM 3 ANSWERS - CONTINUE? Y/(N):y
    ANSWER 1 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN
L2
AN
   2004:57406 CAPLUS
DN
    140:124865
TI
    Detection of prion disease
    Van Oers, Josephus Wilhelmus Alphonsus Maria; Hack, Cornelis Erik;
IN
    Roem-Haagsma, Dorina Dirkje Ina; Langeveld, Johannes Pieter Maria;
    Garssen, Gerrit Jan; ***Jacobs, Jorg Guenther***; Van Engelenburg,
    Franciscus Antonius Cornelis
PA Pepscan Systems B.V., Neth.; Stichting Sanquin Bloedvoorziening
SO Eur. Pat. Appl., 38 pp.
    CODEN: EPXXDW
DT
    Patent
LA English
FAN.CNT 1
    PATENT NO.
                      KIND DATE APPLICATION NO.
                                                               DATE
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EP 1382971 A1 20040121 EP 2002-77910
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                        A2 20040122
                                           WO 2003-NL523
                                                                  20030717
     WO 2004007555
                               20040401
                         A3
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            FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG,
            KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG,
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            YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
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            GW, ML, MR, NE, SN, TD, TG
PRAI EP 2002-77910
                     Α
                              20020717
AB This invention relates to the field of the detection of prion diseases.
    The invention provides a binding mol. or antibody specifically reactive
     with an epitope which is exposed on a part of an aberrant conformer
     (PrPSc) of a prion protein after treatment of said conformer with a
     protease wherein said epitope is not or only partly exposed on a prion
    protein which has not been treated with a protease.
RE.CNT 7
             THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
             ALL CITATIONS AVAILABLE IN THE RE FORMAT
L2
    ANSWER 2 OF 3 USPATFULL on STN
      2003:208289 USPATFULL
AN
      Methods and apparatus for determination and decrease of dynamic
TΙ
      positioning errors of an ablating laser during refractive laser surgery
       Teiwes, Winfried, Teltow/Berlin, GERMANY, FEDERAL REPUBLIC OF
IN
      Huppertz, Michael, Teltow/Berlin, GERMANY, FEDERAL REPUBLIC OF
      Weise, Ralf, Teltow/Berlin, GERMANY, FEDERAL REPUBLIC OF
          ***Jacobs, Jorg*** , Teltow/Berlin, GERMANY, FEDERAL REPUBLIC OF
      US 2003144651 A1
ΡI
                              20030731
                        A1 20021119 (10)
      US 2002-276768
ΑI
                             20010521
      WO 2001-EP5837
DT
      Utility
      APPLICATION
FS
      THE FIRM OF KARL F ROSS, 5676 RIVERDALE AVENUE, PO BOX 900, RIVERDALE
       (BRONX), NY, 10471-0900
CLMN
      Number of Claims: 10
ECL
      Exemplary Claim: 1
DRWN
      8 Drawing Page(s)
LN.CNT 388
      The above described apparatus and methods provide the possibility to
AB
       reduce or even eliminate the effects of delay between image acquisition
       and laser ablation. Thus this will lead to less positioning errors and
       therefore to better ablation results in laser refractive surgery. The
       importance of this invention will increase with decreasing ablating beam
       diameter. The use of synchronization leads to shorter delay times. Hence
       it follows that the duration of the whole treatment decreases as well.
   ANSWER 3 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN
ΔN
    2000:574024 CAPLUS
DN
    133:174276
    Prion test using guanidine thiocyanate for reducing false positive test
ΤI
    Garssen, Gerrit Jan; ***Jacobs, Jorg Gunther***; Langeveld, Joannes
IN
     Pieter Maria; Smits, Marinus Adrianus; Van Keulen, Lucien Johannes
    Mattheus; Schreuder, Bram Edward Cornelis; Bossers, Alexander
     Stichting Dienst Landbouwkundig Onderzoek, Neth.
PA
SO
    PCT Int. Appl., 49 pp.
     CODEN: PIXXD2
DT
    Patent
    English
LA
FAN.CNT 1
                       KIND DATE
                                          APPLICATION NO.
                                                                DATE
    PATENT NO.
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PI WO 2000048003
                        A1 20000817
                                         WO 2000-NL79
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            CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
305 A1 20011107 EP 2000-904139
     EP 1151305
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
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PRAI EP 1999-200391
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    WO 2000-NL79
                                20000209
                         W
     The invention is related to diagnostic methods for detecting transmissible
     spongiform encephalopathies (TSEs) such as BSE and scrapie and related
     disease in humans. The invention provides use of guanidine thiocyanate
     (qdnSCN) or a functional equiv. thereof for treating at least one sample
     derived from a mammal, including humans for reducing the risk of scoring a
     false-pos. test result in testing said sample for the presence or absence
     of aberrant prion protein.
             THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
=> e garssen gerrit jan/au
Εl
            1 GARSSEN G VON/AU
             2
                   GARSSEN GERRIT J/AU
E2
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E3
                 GARSSEN HANS GEORG/AU
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E12
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L3
=> dup rem 13
PROCESSING COMPLETED FOR L3
              4 DUP REM L3 (0 DUPLICATES REMOVED)
=> d bib ab 1-
YOU HAVE REQUESTED DATA FROM 4 ANSWERS - CONTINUE? Y/(N):y
     ANSWER 1 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN
L4
     2004:57406 CAPLUS
AN
DN
     140:124865
     Detection of prion disease
TΙ
     Van Oers, Josephus Wilhelmus Alphonsus Maria; Hack, Cornelis Erik;
     Roem-Haagsma, Dorina Dirkje Ina; Langeveld, Johannes Pieter Maria;
       ***Garssen, Gerrit Jan*** ; Jacobs, Jorg Guenther; Van Engelenburg,
     Franciscus Antonius Cornelis
     Pepscan Systems B.V., Neth.; Stichting Sanquin Bloedvoorziening
PΑ
     Eur. Pat. Appl., 38 pp.
SO
     CODEN: EPXXDW
рΤ
     Patent
     English
T.A
FAN.CNT 1
     PATENT NO.
                         KIND DATE
                                            APPLICATION NO.
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                                20040121
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     WO 2004007555
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     WO 2004007555
                          A3
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              GW, ML, MR, NE, SN, TD, TG
PRAI EP 2002-77910
                          Α
                                 20020717
     This invention relates to the field of the detection of prion diseases.
     The invention provides a binding mol. or antibody specifically reactive
     with an epitope which is exposed on a part of an aberrant conformer
     (PrPSc) of a prion protein after treatment of said conformer with a
     protease wherein said epitope is not or only partly exposed on a prion
     protein which has not been treated with a protease.
               THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT 7
               ALL CITATIONS AVAILABLE IN THE RE FORMAT
     ANSWER 2 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN
L4
     2000:574024 CAPLUS
DN
     133:174276
     Prion test using guanidine thiocyanate for reducing false positive test
ΤI
     results
     ***Garssen, Gerrit Jan*** ; Jacobs, Jorg Gunther; Langeveld, Joannes
Pieter Maria; Smits, Marinus Adrianus; Van Keulen, Lucien Johannes
IN
     Mattheus; Schreuder, Bram Edward Cornelis; Bossers, Alexander
     Stichting Dienst Landbouwkundig Onderzoek, Neth.
     PCT Int. Appl., 49 pp.
SO
     CODEN: PIXXD2
ידים
     Patent
     English
FAN.CNT 1
                           KIND DATE
                                               APPLICATION NO.
     PATENT NO.
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                                  20000817
                                              WO 2000-NL79
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                           A1
PΤ
     WO 2000048003
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              IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
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              CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                                                         20000209
     EP 1151305
                          A1 20011107 EP 2000-904139
          R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, SI, LT, LV, FI, RO
PRAI EP 1999-200391
                                 19990211
                        А
                                  20000209
     WO 2000-NL79
                            W
     The invention is related to diagnostic methods for detecting transmissible
AB
     spongiform encephalopathies (TSEs) such as BSE and scrapic and related
     disease in humans. The invention provides use of guanidine thiocyanate
      (gdnSCN) or a functional equiv. thereof for treating at least one sample
      derived from a mammal, including humans for reducing the risk of scoring a
     false-pos. test result in testing said sample for the presence or absence
     of aberrant prion protein.
RE.CNT 4
               THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
               ALL CITATIONS AVAILABLE IN THE RE FORMAT
     ANSWER 3 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN
     1978:46572 CAPLUS
AN
DN
     88:46572
     Studies on DNA unwinding. Proton and phosphorus nuclear magnetic
TI
     resonance studies of gene V protein from bacteriophage M13, interacting
     with d(pC-G-C-G)
       ***Garssen, Gerrit J.*** ; Hilbers, Cornelis W.; Schoenmakers, John G.
ΑIJ
     G.; Van Boom, Jacques H.
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Lab. Biofys. Chem., Univ. Nijmegen, Nijmegen, Neth.

CS

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European Journal of Biochemistry (1977), 81(3), 453-63
SO
     CODEN: EJBCAI; ISSN: 0014-2956
חתי
     Journal
LΑ
     English
    The interaction of gene V protein from bacteriophage M13 with the
AB
     self-complementary tetranucleotide d(pC-G-C-G) was studied by 1H and 31P
    NMR. Using the H-bonded proton resonances of the Watson-Crick base pairs
     as a probe, it is shown that the protein is able to unwind the small
     double-helical fragment even at 0.degree.. Binding of the tetranucleotide
     causes changes in the arom. part of the 1H NMR spectrum of the complex,
     suggesting that arom. residues, most likely tyrosines, take part in the
     protein-nucleic acid interaction. From the 31P NMR spectra of the
     protein-nucleic acid complex, it follows that the pK value of the
     5'-terminal phosphate is lower than for the free nucleic acid species.
     Moreover, the exchange of protein between nucleic acid substrates is fast.
     Combination of these measurements suggests a mechanism of unwinding on the
     tetranucleotide level. To a large extent the unwinding is detd. by
     fluctuations in the double-helical DNA structure.
     ANSWER 4 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN
L4
     1976:101428 CAPLUS
AN
DN
    84:101428
    The formation of threo-11-hydroxy-trans-12:13-epoxy-9-cis-octadecenoic
ΤI
     acid by enzymic isomerization of 13-L-hydroperoxy-9-cis,11-trans-
     octadecadienoic acid by soybean lipoxygenase-1
       ***Garssen, Gerrit J.*** ; Veldink, Gerrit A.; Vliegenthart, Johannes
ΑU
     F. G.; Boldingh, Jan
     Org. Chem. Lab., Rijksuniv., Utrecht, Neth.
CS
     European Journal of Biochemistry (1976), 62(1), 33-6
SO
     CODEN: EJBCAI; ISSN: 0014-2956
DT
     Journal
LΑ
     English
     The interaction of soybean lipoxygenase-1 with 13-L-hydroperoxy-9-cis,11-
     trans-octadecadienoic acid (13-hydroperoxylinoleate), the product of the
     enzymic dioxygenation of linoleic acid, gave either a yellow or a
     purple-colored enzyme species depending on the amt. of product used.
     an excess of 13-hydroperoxylinoleate, a labile purple-colored enzyme
     species was formed which reverted to a yellow-colored form with
     concomitant conversion of the hydroperoxy compd. In this reaction,
     13-hydroperoxylinoleate isomerized into threo-11-hydroxy-trans-12:13-epoxy-
     9-cis-octadecenoic acid as could be concluded from NMR and mass spectral
     data. Expts. with hydroperoxylinoleate-13-1802 showed a high retention
     (70%) of the hydroperoxy O atoms in the end product.
=> e langeveld joannes pierter/au
E1
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E2
            62
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E3
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                 LANGEVELD KEES/AU
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                   LANGEVELD L/AU
E12
=> s e1-e4 and prion?
            15 ("LANGEVELD JAN P"/AU OR "LANGEVELD JAN P M"/AU OR "LANGEVELD
L_5
               JOANNES PIERTER"/AU OR "LANGEVELD JOANNES PIETER MARIA"/AU) AND
=> dup rem 15
PROCESSING COMPLETED FOR L5
              6 DUP REM L5 (9 DUPLICATES REMOVED)
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=> d bib ab 1-

YOU HAVE REQUESTED DATA FROM 6 ANSWERS - CONTINUE? Y/(N):y

- ANSWER 1 OF 6 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN L6 DUPLICATE 1
- 2004:77483 BIOSIS ΔN
- PREV200400079379
- Enzymatic degradation of \*\*\*prion\*\*\* protein in brain stem from infected cattle and sheep.
- \*\*\*Langeveld, Jan P. M.\*\*\* [Reprint Author]; Wang, Jeng-Jie; van de ΑŰ Wiel, Dick F. M.; Shih, Giles C.; Garssen, G. Jan; Bossers, Alex; Shih, Jason C. H.
- Central Institute for Animal Disease Control, 8203 AA, PO Box 2004, CS Lelystad, Netherlands jan.langeveld@wur.nl
- Journal of Infectious Diseases, (1 December 2003) Vol. 188, No. 11, pp. 1782-1789. print. CODEN: JIDIAQ. ISSN: 0022-1899.
- DT Article
- English
- Entered STN: 4 Feb 2004 Last Updated on STN: 4 Feb 2004
- \*\*\*Prions\*\*\* -infectious agents involved in transmissible spongiform encephalopathies-normally survive proteolytic and mild protein-destructive processes. Using bacterial keratinase produced by Bacillus licheniformis strain PWD-1, we tested conditions to accomplish the full degradation of protein (PrP) in brain-stem tissue from animals with bovine spongiform encephalopathy and scrapie. The detection of PrPSc, the disease-associated isoform of PrP, in homogenates was done by Western blotting and various antibodies. The results indicated that only in the presence of detergents did heat pretreatment at >100degreeC allow the extensive enzymatic breakdown of PrPSc to a state where it is immunochemically undetectable. Proteinase K and 2 other subtilisin proteases, but not trypsin and pepsin, were also effective. This enzymatic process could lead to the development of a method for the decontamination of medical and laboratory equipment. The ultimate effectiveness of this method of \*\*\*prion\*\*\* inactivation has to be tested in mouse bioassays.
- ANSWER 2 OF 6 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN L6 DUPLICATE 2
- 2002:572409 BIOSIS ΔN
- PREV200200572409
- PrPCWD lymphoid cell targets in early and advanced chronic wasting disease TΙ of mule deer.
- Sigurdson, Christina J.; Barillas-Mury, Carolina; Miller, Michael W.; AU Oesch, Bruno; Van Keulen, Lucien J. M.; \*\*\*Langeveld, Jan P. M.\*\*\*; Hoover, Edward A. [Reprint author]
- Department of Microbiology, Immunology and Pathology, College of CS Veterinary, Colorado State University, Fort Collins, CO, 80523-1671, USA ehoover@lamar.colostate.edu
- Journal of General Virology, (October, 2002) Vol. 83, No. 10, pp. 2617-2628. print. CODEN: JGVIAY. ISSN: 0022-1317.
- DTArticle
- English LA
- Entered STN: 7 Nov 2002
  - Last Updated on STN: 7 Nov 2002
- Up to 15% of free-ranging mule deer in northeastern Colorado and southeastern Wyoming, USA, are afflicted with a \*\*\*prion\*\*\* disease, or transmissible spongiform encephalopathy (TSE), known as chronic wasting disease (CWD). CWD is similar to a subset of TSEs including scrapie and variant Creutzfeldt-Jakob disease in which the abnormal \*\*\*prion\*\*\* protein isoform, PrPCWD, accumulates in lymphoid tissue. Experimental scrapie studies have indicated that this early lymphoid phase is an important constituent of \*\*\*prion\*\*\* replication interposed between mucosal entry and central nervous system accumulation. To identify the lymphoid target cells associated with PrPCWD, we used triple-label immunofluorescence and high-resolution confocal microscopy on tonsils from naturally infected deer in advanced disease. We detected PrPCWD primarily extracellularly in association with follicular dendritic and B cell membranes as determined by frequent co-localization with antibodies against membrane bound immunoglobulin and CD21. There was minimal co-localization with cytoplasmic labels for follicular dendritic cells

(FDC). This finding could indicate FDC capture of PrPCWD, potentially in association with immunoglobulin or complement, or PrPC conversion on FDC. In addition, scattered tingible body macrophages in the germinal centre contained coarse intracytoplasmic aggregates of PrPCWD, reflecting either phagocytosis of PrPCWD on FDC processes, apoptotic FDC or B cells, or actual PrPCWD replication within tingible body macrophages. To compare lymphoid cell targets in early and advanced disease, we also examined: (i) PrpCWD distribution in lymphoid cells of fawns within 3 months of oral CWD exposure and (ii) tonsil biopsies from preclinical deer with naturally acquired CWD. These studies revealed that the early lymphoid cellular distribution of PrPCWD was similar to that in advanced disease, i.e. in a pattern suggesting FDC association. We conclude that in deer, PrPCWD accumulates primarily extracellularly and associated with FDCs and possibly B cells - a finding which raises questions as to the cells \*\*\*prion\*\*\* responsible for pathological production.

- L6 ANSWER 3 OF 6 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN DUPLICATE 3
- AN 2002:574352 BIOSIS
- DN PREV200200574352
- TI Temporal and spatial relationship between the death of PrP-damaged neurones and microglial activation.
- AU Bate, Clive [Reprint author]; Boshuizen, Ronald S.; \*\*\*Langeveld, Jan P.\*\*\*

  \*\*\* M.\*\*\*; Williams, Alun
- CS Department of Veterinary Pathology, Veterinary School, Institute of Comparative Medicine, University of Glasgow, Bearsden Road, Glasgow, G61 10H. UK
- SO Neuroreport, (16 September, 2002) Vol. 13, No. 13, pp. 1695-1700. print. CODEN: NERPEZ. ISSN: 0959-4965.
- DT Article
- LA English
- ED Entered STN: 7 Nov 2002
- Last Updated on STN: 7 Nov 2002
- Previous studies have demonstrated a role for microglia in the neuronal loss that occurs in the transmissible spongiform encephalopathies or \*\*\*prion\*\*\* diseases. In the present studies, the processes that lead to the death of neurones treated with synthetic peptides derived from the \*\*\*prion\*\*\* protein (PrP) were fully activated within 1 h, although neuronal cell death was not seen until 24 h later. Similarly, neurones exposed to PrP peptides for only 1 h activated microglia and a temporal relationship between the production of interleukin-6, an indicator of microglial activation, and microglial killing of PrP-treated neurones was also demonstrated. Activation of microglia and microglia-mediated killing of PrP-treated neurones or scrapie-infected neuroblastoma cells were maximal only when microglia were in direct contact with neurones.
- L6 ANSWER 4 OF 6 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN DUPLICATE 4
- AN 2002:172961 BIOSIS
- DN PREV200200172961
- TI Adult human microglia secrete cytokines when exposed to neurotoxic \*\*\*prion\*\*\* protein peptide: No intermediary role for prostaglandin E2.
- AU Veerhuis, Robert [Reprint author]; Hoozemans, Jeroen J. M.; Janssen, Ingrid; Boshuizen, Ronald S.; \*\*\*Langeveld, Jan P. M.\*\*\*; Eikelenboom, Piet
- CS Department of Psychiatry, Research Institute Neurosciences Vrije
  Universiteit, Vrije Universiteit Medical Center, Amsterdam, Netherlands
  r.veerhuis@vumc.nl
- SO Brain Research, (25 January, 2002) Vol. 925, No. 2, pp. 195-203. print. CODEN: BRREAP. ISSN: 0006-8993.
- DT Article
- LA English
- ED Entered STN: 5 Mar 2002
  - Last Updated on STN: 5 Mar 2002
- \*\*\*Prion\*\*\* diseases are characterized by accumulation of protease resistant isoforms of \*\*\*prion\*\*\* protein (termed PrPSC), glial activation and neurodegeneration. The time course of PrP deposition, appearance of activated microglia, and of neuronal apoptosis in experimentally-induced \*\*\*prion\*\*\* disease suggests that microglial activation precedes the process of neuronal loss. Activated microglia and inflammatory mediators, including cytokines and prostaglandin E2 (PGE2)

co-localize with PrP deposits. In vitro, mouse microglia secrete neurotoxic agents and interleukins (IL)-1 and IL-6, when exposed to synthetic peptides representing the neurotoxic fragment of PrP. In this study, adult human microglia were found to secrete IL-6 and TNF-alpha upon exposure to synthetic fibrillar PrP105-132, the putative transmembrane domain of PrP. Little cytokine release occurred following exposure of microglia to C-terminally amidated, nonfibrillar PrP105-132, suggesting that the degree of fibrillarity of PrP peptides affects their biological properties. Non-steroidal anti-inflammatory drugs (NSAIDs) are thought to exert beneficial effects in neurodegenerative disorders through suppressive effects on microglial activation and on cyclooxygenase (COX) activity. Since microglial COX-2 expression and PGE2 synthesis are increased in human and experimental \*\*\*prion\*\*\* diseases, we investigated the effects of the NSAIDs indomethacin and BF389, an experimental COX-2 selective inhibitor, on the PrP105-132-induced microglial IL-6 and TNF-alpha synthesis in vitro. No inhibitory effects of the NSAIDs were observed. Furthermore, PrP105-132 did not stimulate synthesis in astrocytes, the PrP-induced IL-6 synthesis in human adult microglia is not PGE2 mediated.

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microqlial PGE2 synthesis. We conclude that, unlike IL-1beta-induced IL-6
    ANSWER 5 OF 6 CAPLUS COPYRIGHT 2004 ACS on STN
L<sub>6</sub>
    2000:574024 CAPLUS
AN
DN
     133:174276
                      test using guanidine thiocyanate for reducing false
      ***Prion***
TT
     positive test results
    Garssen, Gerrit Jan; Jacobs, Jorg Gunther; ***Langeveld, Joannes Pieter***
** Maria*** ; Smits, Marinus Adrianus; Van Keulen, Lucien Johannes Mattheus;
TN
     Schreuder, Bram Edward Cornelis; Bossers, Alexander
     Stichting Dienst Landbouwkundig Onderzoek, Neth.
PΑ
SO
     PCT Int. Appl., 49 pp.
     CODEN: PIXXD2
ידים
    Patent
    English
LΑ
FAN.CNT 1
     PATENT NO.
                         KIND DATE
                                              APPLICATION NO.
                         ____
                                              ______
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                                            WO 2000-NL79
                          A1
                                 20000817
                                                                      20000209
PΤ
     WO 2000048003
         W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
             CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
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             SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM,
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         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
             CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                          A1 20011107 EP 2000-904139
                                                                       20000209
     EP 1151305
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
PRAI EP 1999-200391 A
                                 19990211
                                 20000209
     WO 2000-NL79
                          W
     The invention is related to diagnostic methods for detecting transmissible
     spongiform encephalopathies (TSEs) such as BSE and scrapie and related
     disease in humans. The invention provides use of guanidine thiocyanate
     (gdnSCN) or a functional equiv. thereof for treating at least one sample
     derived from a mammal, including humans for reducing the risk of scoring a
     false-pos. test result in testing said sample for the presence or absence
     of aberrant ***prion***
                                  protein.
RE.CNT 4
              THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
     ANSWER 6 OF 6 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
L6
     DUPLICATE 5
     1998:322054 BIOSIS
ΙNΑ
     PREV199800322054
     An antibody raised against a conserved sequence of the ***prion***
     protein recognizes pathological isoforms in human and animal ***prion***
     diseases, including Creutzfeldt-Jakob disease and bovine spongiform
     encephalopathy.
     Piccardo, Pedro [Reprint author]; ***Langeveld, Jan P. M.***; Hill,
ΑIJ
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Andrew F.; Dlouhy, Stephen R.; Young, Katherine; Giaccone, Giorgio; Rossi, Giacomina; Bugiani, Marianna; Bugiani, Orso; Meloen, Rob H.; Collinge, John; Tagliavini, Fabrizio; Ghetti, Bernardino Indiana Univ. Med. Center, Div. Neuropathology, 635 Barnhill Drive, MS CS A-142, Indianapolis, IN, USA American Journal of Pathology, (June, 1998) Vol. 152, No. 6, pp. SO 1415-1420. print. CODEN: AJPAA4. ISSN: 0002-9440. DT Article TιA English Entered STN: 22 Jul 1998 CE Last Updated on STN: 22 Jul 1998 protein (PrP) have been critical to the Antibodies to the \*\*\*prion\*\*\* AΒ neuropathological and biochemical characterization of PrP-related degenerative diseases in humans and animals. Although PrP is highly con served evolutionarily, there is some sequence divergence among species; as a consequence, anti-PrP antibodies have a wide spectrum of reactivity (from strong immunopositivity to lack of reactivity) when challenged with PrP from diverse species. We have produced an antibody (anti-PrP95-108) raised against a synthetic peptide corresponding to residues 95 to 108 of human PrP and have characterized it by epitope mapping, Western immunoblot analysis, and immunohistochemistry. The antibody recognizes not only human PrP isoforms but also pathological PrP from all species tested (i.e., cattle, sheep, hamsters, and mice). This is probably due to the fact that the epitope recognized by this antibody includes residues 100 to 108 of human PrP, a sequence that is also present in PrP of several other species. Thus, this reagent is valuable not only for the study of human \*\*\*prion\*\*\* diseases but also for analysis of the possible relationship between human and animal disorders. => smits marinus a/au SMITS IS NOT A RECOGNIZED COMMAND The previous command name entered was not recognized by the system. For a list of commands available to you in the current file, enter "HELP COMMANDS" at an arrow prompt (=>). => e smits marinus a/au SMITS MARIANNE E/AU 1 SMITS MARIEKE T/AU E2 1 1 --> SMITS MARINUS A/AU E4 SMITS MARINUS A L/AU 1 SMITS MARINUS ADRIANUS/AU E5 7 SMITS MARIUS/AU 7 E6 SMITS MARK/AU E7 1 SMITS MARK M/AU E8 2 SMITS MARTIJNTJE/AU 7 E9 E10 2 SMITS MARTIN/AU SMITS MARTINO M/AU 2 E11 E12 SMITS MATTHIJS/AU => s e3-e5 9 ("SMITS MARINUS A"/AU OR "SMITS MARINUS A L"/AU OR "SMITS MARINU L7 S ADRIANUS"/AU) => dup rem 17 PROCESSING COMPLETED FOR L7 7 DUP REM L7 (2 DUPLICATES REMOVED) => d bib ab 1-YOU HAVE REQUESTED DATA FROM 7 ANSWERS - CONTINUE? Y/(N):y ANSWER 1 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN L8 2003:791415 CAPLUS AN 139:287271 DN Methods and kits for detection of single nucleotide polymorphisms in nucleic acids Agbo, Edwin Chukwura; Te Pas, Marinus Frederick Willem; \*\*\*Smits,\*\*\* Marinus Adrianus\*\*\* PA Id-Lelystad, Instituut voor Dierhouderij en Diergezondheid B. V., Neth.

SO Eur. Pat. Appl., 28 pp.

CODEN: EPXXDW DТ Patent LΑ English FAN.CNT 1 DATE APPLICATION NO. PATENT NO. KIND DATE \_ \_ \_ \_ 20031008 EP 2002-76336 20020405 EP 1350853 A1 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR 20031023 WO 2003-NL253 20030404 WO 2003087409 A1 W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG PRAI EP 2002-76336 A 20020405 The present invention provides methods for producing a nucleic acid fingerprint as well as methods for detecting sequence polymorphisms between one or more genomes. The methods involve fragmenting a nucleic acid into nucleic acid fragments with ends that are compatible to ligation with at least one adapter, performing a ligation reaction between the compatible ends of the nucleic acid fragments and at least one adapter, amplifying the nucleic acid fragments by using at least one amplification primer, and generating a nucleic acid fingerprint from the amplified fragments. A method according to the present invention permits high-resoln. fingerprinting while maintaining stringency in a PCR reaction. In another aspect, the invention also provides a kit for prepg. nucleic acid fingerprints according to methods of the invention. THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT 6 ALL CITATIONS AVAILABLE IN THE RE FORMAT ANSWER 2 OF 7 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN L8DUPLICATE 1 2003:85902 BIOSIS AN DN PREV200300085902 Recombinant vaccine for prevention and/or treatment of pleuropneumonia ТT infections. Kamp, Elbarte Margriet [Inventor, Reprint Author]; \*\*\*Smits, Marinus\*\*\* AU Adrianus\*\*\* [Inventor] Wijngaard 27, 8212 CC Lelystad, Netherlands CS PΙ US 6500435 December 31, 2002 Official Gazette of the United States Patent and Trademark Office Patents, SO (Dec 31 2002) Vol. 1265, No. 5. http://www.uspto.gov/web/menu/patdata.html . e-file. ISSN: 0098-1133 (ISSN print). DT Patent English T.A ED Entered STN: 6 Feb 2003 Last Updated on STN: 6 Feb 2003 The invention provides a vaccine for the prevention and/or the treatment of infection by Actinobacillus pleuropneumoniae, the causative agent of porcine pleuropneumonia, which vaccine contains at least an immunogenic part of at least one cytolytic protein of A. pleuropneumoniae produced by recombinant DNA, and detoxified derivatives thereof. Three of such cytolytic proteins are identified and a vaccine containing these, or parts or derivatives thereof, ensures protection against all known serotypes of A. pleuropneumoniae. The cytolytic proteins are produced by inserting a nucleotide sequence encoding one or more of the proteins or parts thereof in a host cell, cultivating the host cell and recovering the proteins. Another vaccine contains the genetic information for one or more of the cytolytic proteins, and a passive vaccine contains antibodies against

DNA probes for use in diagnostics.

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these proteins. The invention further provides monoclonal antibodies and

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AN
    2000:574024 CAPLUS
DN
    133:174276
    Prion test using guanidine thiocyanate for reducing false positive test
    results
    Garssen, Gerrit Jan; Jacobs, Jorg Gunther; Langeveld, Joannes Pieter
    Maria; ***Smits, Marinus Adrianus*** ; Van Keulen, Lucien Johannes
    Mattheus; Schreuder, Bram Edward Cornelis; Bossers, Alexander
    Stichting Dienst Landbouwkundig Onderzoek, Neth.
PΑ
    PCT Int. Appl., 49 pp.
SO
     CODEN: PIXXD2
DТ
    Patent
    English
FAN.CNT 1
                                            APPLICATION NO.
                        KIND DATE
     PATENT NO.
                                _____
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                                           WO 2000-NL79
                                20000817
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    WO 2000048003
PΤ
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         W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
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             IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
             MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
             CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                                                    20000209
                          A1 20011107 EP 2000-904139
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
PRAI EP 1999-200391
                               19990211
                         Α
     WO 2000-NL79
                          W
                                 20000209
     The invention is related to diagnostic methods for detecting transmissible
     spongiform encephalopathies (TSEs) such as BSE and scrapic and related
     disease in humans. The invention provides use of guanidine thiocyanate
     (gdnSCN) or a functional equiv. thereof for treating at least one sample
     derived from a mammal, including humans for reducing the risk of scoring a
     false-pos. test result in testing said sample for the presence or absence
     of aberrant prion protein.
              THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT 4
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
     ANSWER 4 OF 7 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
     DUPLICATE 2
     2000:277831 BIOSIS
AN
    PREV200000277831
DM
    Nucleic acid encoding Actinobacillus pleuropneumoniae cytolytic proteins.
ΤI
    Kamp, Elbarte Margriet [Inventor, Reprint author]; ***Smits, Marinus***
          Adrianus*** [Inventor]
CS Wijngaard 27, 8212 CC Lelystad, Netherlands
     US 5994525 November 30, 1999
PΤ
     Official Gazette of the United States Patent and Trademark Office Patents,
     (Nov. 30, 1999) Vol. 1228, No. 5. e-file.
     CODEN: OGUPE7. ISSN: 0098-1133.
DT
     Patent
LA
     English
     Entered STN: 6 Jul 2000
     Last Updated on STN: 7 Jan 2002
     The invention provides a vaccine for the prevention and/or the treatment
     of infection by Actinobacillus pleuropneumoniae, the causative agent of
     porcine pleuropneumonia, which vaccine contains at least an immunogenic
     part of at least one cytolytic protein of A. pleuropneumoniae produced by
     recombinant DNA, and detoxified derivatives thereof. Three of such
     cytolytic proteins are identified and a vaccine containing these, or parts
     or derivatives thereof, ensures protection against all known serotypes of
     A. pleuropneumoniae. The cytolytic proteins are produced by inserting a
     nucleotide sequence encoding one or more of the proteins or parts thereof
      in a host cell, cultivating the host cell and recovering the proteins.
     another vaccine contains the genetic information for one or more of the
     cytolytic proteins, and a passive vaccine contains antibodies against
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these proteins. The invention further provides monoclonal antibodies and

DNA probes for use in diagnostics.

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ANSWER 5 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN
    1997:679268 CAPLUS
ΑN
DN
     127:316560
    Method for the detection of prion diseases
тT
    Schreuder, Bram Edward Cornelis; Van Keulen, Lucius Johannes Mattheus;
     Vromans, Maria Elisabeth Wilhelmina; Langeveld, Johannes Pieter Maria;
      ***Smits, Marinus Adrianus***
    Instituut voor Dierhouderij en Diergezondheid (Id-Dlo), Neth.; Schreuder,
PΑ
     Bram Edward Cornelis; Van Keulen, Lucius Johannes Mattheus; Vromans, Maria
     Elisabeth Wilhelmina; Langeveld, Johannes Pieter Maria; Smits, Marinus
    Adrianus
so
    PCT Int. Appl., 29 pp.
     CODEN: PIXXD2
DΥ
    Patent
LΑ
    English
FAN.CNT 1
                                           APPLICATION NO.
                        KIND DATE
     PATENT NO.
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                                19971009 WO 1997-NL166
     WO 9737227
                         A1
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             LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL,
             PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
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             GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN,
             ML, MR, NE, SN, TD, TG
                                           CA 1997-2250800
                                19971009
     CA 2250800
                         AA
                                19971022
                                           AU 1997-21808
     AU 9721808
                         A1
                               19991202
     AU 713529
                         B2
                                19990120
                                            EP 1997-914658
     EP 891552
                         A1
                               20030402
     EP 891552
                         B1
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
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19970402

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19970402

19970402

19981001

WO 1997-NL166 The invention provides methods for the detection of prion diseases, such as scrapie of sheep, bovine spongiform encephalopathy of cattle, Creutzfeld-Jacob disease of man, whereby aberrant proteins or prion proteins are detected in tissues which can be sampled from live animals. Peptides such as segments of the scrapie protein can be used to raise antibodies for use in immunoassays of lymphoid tissues such as the

19990803

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19981203

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19970402

T2 20000509

BR 1997-8421

NZ 1997-332132

JP 1997-535157

AT 1997-914658

NO 1998-4602

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ANSWER 6 OF 7 CAPLUS COPYRIGHT 2004 ACS on STN
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1993:624252 CAPLUS AN

BR 9708421

JP 2000505559

PRAI EP 1996-200917 A

JP 3333213

NZ 332132

AT 236407

NO 9804602

DN 119:224252

Recombinant vaccine for prevention and/or treatment of pleuropneumonia TI

Kamp, Elbarte M.; \*\*\*Smits, Marinus A.\*\*\* TN

IE, SI, LT, LV, FI, RO

Α

А

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E

Α

W

Centraal Diergeneeskundig Instituut, Neth. PA

Can. Pat. Appl., 50 pp. SO CODEN: CPXXEB

DT Patent

English T.A

FAN.CNT 1										
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE						
PI CA 2045950	AA	19921229	CA 1991-2045950	19910628						
US 5994525	A	19991130	US 1995-488706	19950609						
US 6500435	B1	20021231	US 1998-62126	19980417						
PRAI CA 1991-2045950	A	19910628								
US 1991-722971	B1	19910628								
US 1993-138609	B3	19931015								
US 1995-488706	A1	19950609								

Ab A vaccine is provided for the prevention and/or treatment of infection by Actinobacillus pleuropneumoniae, the causative agent of porcine pleuropneumonia. The vaccine contains at least an immunogenic part of .gtoreq.1 cytolytic protein of A. pleuropneumoniae produced by recombinant DNA, and detoxified derivs. thereof. Three such cytolytic proteins (cytolysins I and II and III) are identified, and a vaccine contg. these, or parts or derivs. thereof, ensures protection against all known serotypes of A. pleuropneumoniae. Another vaccine contains the genetic information for .gtoreq.1 of the cytolytic proteins, and a passive vaccine contains antibodies against these proteins. Also disclosed are monoclonal antibodies (MAbs) and DNA probes for use in diagnostics. Gene cloning and identification of the cytolysins are described, as are heterogeneity in the cytolysin II genetic determinant of A. pleuropneumoniae serotypes, identification of hemolytic and cytotoxic proteins of A. pleuropneumoniae by MAbs, prodn. of cytolysins, and prepn. of a recombinant vaccine.

ANSWER 7 OF 7 USPATFULL on STN

L8

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83:3620 USPATFULL
ΔN
TI
      Scaffolding system
        ***Smits, Marinus A. L.*** , Henley-on-Klip, South Africa
IN
       SGB Group Limited, Surrey, England (non-U.S. corporation)
PΑ
PΤ
      US 4369859
                              19830125
                               19810115 (6)
ΑI
      US 1981-225385
                          19800115
PRAI
      ZA 1980-225
DT
      Utility
FS
      Granted
EXNAM Primary Examiner: Machado, Reinaldo P.
       Buell, Blenko, Ziesenheim & Beck
LREP
      Number of Claims: 10
CLMN
ECL
       Exemplary Claim: 1
       4 Drawing Figure(s); 3 Drawing Page(s)
DRWN
LN.CNT 283
       In a scaffolding system an upright tube is provided with an annular dish
AB
       shaped protrusion. A housing on the end of a horizontal tube carries a
       lever with a cam face that engages the protrusion to lock the tubes
       together. The horizontal tube can be at any radial orientation relative
       to the upright tube.
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                   VAN KEULEN L J M/AU
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                   VAN KEULEN LUCIEN JOHANNES MATTHEUS/AU
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            16
E7
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                   VAN KEULEN MARRIT/AU
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            46 ("VAN KEULEN L J M"/AU OR "VAN KEULEN LISA"/AU OR "VAN KEULEN
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               LUCIEN "/AU OR "VAN KEULEN LUCIEN J M"/AU OR "VAN KEULEN LUCIEN
               JOHANNES MATTHEUS"/AU OR "VAN KEULEN LUCIUS JOHANNES MATTHEUS"/A
               U) AND PRION?
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PROCESSING COMPLETED FOR L9
T-1 0
             21 DUP REM L9 (25 DUPLICATES REMOVED)
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YOU HAVE REQUESTED DATA FROM 21 ANSWERS - CONTINUE? Y/(N):y
L10 ANSWER 1 OF 21 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 1
     2004:299720 CAPLUS
AN
DN
     141:5358
     Discrimination between scrapie and bovine spongiform encephalopathy in
TΙ
     sheep by molecular size, immunoreactivity, and glycoprofile of
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\*\*\*prion\*\*\* protein

AU Thuring, C. M. A.; Erkens, J. H. F.; Jacobs, J. G.; Bossers, A.; Keulen, L. J. M.\*\*\* ; Garssen, G. J.; Van Zijderveld, F. G.; Ryder, S. J.; Groschup, M. H.; Sweeney, T.; Langeveld, J. P. M.

Central Institute for Animal Disease Control, Lelystad, 8203 AA, Neth. CS

Journal of Clinical Microbiology (2004), 42(3), 972-980 SO CODEN: JCMIDW; ISSN: 0095-1137

American Society for Microbiology PΒ

DTJournal

LΑ English

A procedure for discrimination between scrapie and bovine spongiform AB encephalopathy (BSE) in sheep is of importance for establishing whether BSE has entered the sheep population. Since BSE has not yet been found in sheep at the farm level, such discrimination procedures can be developed only with exptl. sheep BSE. Two distinctive mol. features of the \*\*\*prion\*\*\* protein (PrP)-mol. size and glycosylation profile-in proteinase K digests of brain stem tissue from sheep were used here; upon Western blotting, these features led to an unequivocal discrimination among natural scrapie, exptl. scrapie, and exptl. BSE. The higher electrophoretic mobility of PrP in sheep BSE could be best obsd. after deglycosylation treatment with N-glycosidase F. A simpler method for confirmation of this size difference involved comparison of the ratios for the binding of two monoclonal antibodies: P4 and 66.94b4. Based on epitope mapping studies with P4 and peptides, it appeared that N-terminal amino acid sequence WGQGGSH was intact only in sheep scrapie digests. Another feature typical for PrP in sheep BSE was the large fraction of diglycosylated PrP (70% or more). These data were obtained for a large group of pos. sheep, consisting of 7 sheep with exptl. BSE infection (genotypes: 6 ARQ/ARQ and one AHQ/AHQ), 48 sheep naturally infected with scrapie (6 different genotypes), and 3 sheep with primary exptl. scrapie infection. Routine tests of slaughter material serve well for the initial detection of both BSE and scrapie. With Western blotting as a rapid follow-up test, a 66.94b4/P4 antibody binding ratio above 1.5 is a

practical indicator for serious suspicion of BSE infection in sheep. THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT 43 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 2 OF 21 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on DUPLICATE 2

2002:572409 BIOSIS AΝ

PREV200200572409

PrPCWD lymphoid cell targets in early and advanced chronic wasting disease of mule deer.

Sigurdson, Christina J.; Barillas-Mury, Carolina; Miller, Michael W.; Oesch, Bruno; \*\*\*Van Keulen, Lucien J. M.\*\*\* ; Langeveld, Jan P. M.; Hoover, Edward A. [Reprint author]

Department of Microbiology, Immunology and Pathology, College of CS Veterinary, Colorado State University, Fort Collins, CO, 80523-1671, USA ehoover@lamar.colostate.edu

Journal of General Virology, (October, 2002) Vol. 83, No. 10, pp. 2617-2628. print. CODEN: JGVIAY. ISSN: 0022-1317.

Article DΤ

English

Entered STN: 7 Nov 2002 ED

Last Updated on STN: 7 Nov 2002

Up to 15% of free-ranging mule deer in northeastern Colorado and southeastern Wyoming, USA, are afflicted with a \*\*\*prion\*\*\* disease, or transmissible spongiform encephalopathy (TSE), known as chronic wasting disease (CWD). CWD is similar to a subset of TSEs including scrapie and variant Creutzfeldt-Jakob disease in which the abnormal \*\*\*prion\*\*\* protein isoform, PrPCWD, accumulates in lymphoid tissue. Experimental scrapie studies have indicated that this early lymphoid phase is an important constituent of \*\*\*prion\*\*\* replication interposed between mucosal entry and central nervous system accumulation. To identify the lymphoid target cells associated with PrPCWD, we used triple-label immunofluorescence and high-resolution confocal microscopy on tonsils from naturally infected deer in advanced disease. We detected PrPCWD primarily extracellularly in association with follicular dendritic and B cell membranes as determined by frequent co-localization with antibodies against membrane bound immunoglobulin and CD21. There was minimal

co-localization with cytoplasmic labels for follicular dendritic cells (FDC). This finding could indicate FDC capture of PrPCWD, potentially in association with immunoglobulin or complement, or PrPC conversion on FDC. In addition, scattered tingible body macrophages in the germinal centre contained coarse intracytoplasmic aggregates of PrPCWD, reflecting either phagocytosis of PrPCWD on FDC processes, apoptotic FDC or B cells, or actual PrPCWD replication within tingible body macrophages. To compare lymphoid cell targets in early and advanced disease, we also examined: (i) PrPCWD distribution in lymphoid cells of fawns within 3 months of oral CWD exposure and (ii) tonsil biopsies from preclinical deer with naturally acquired CWD. These studies revealed that the early lymphoid cellular distribution of PrPCWD was similar to that in advanced disease, i.e. in a pattern suggesting FDC association. We conclude that in deer, PrPCWD accumulates primarily extracellularly and associated with FDCs and possibly B cells - a finding which raises questions as to the cells \*\*\*prion\*\*\* responsible for pathological production.

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L10 ANSWER 3 OF 21 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN DUPLICATE 3

AN 2002:284421 BIOSIS

DN PREV200200284421
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TI Early and late pathogenesis of natural scrapic infection in sheep.

AU \*\*\*van Keulen, L. J. M.\*\*\* [Reprint author]; Vromans, M. E. W.; van Zijderveld, F. G.

CS Institute for Animal Science and Health (ID-Lelystad), NL-8200 AB, Lelystad, Netherlands
L.J.M.vanKeulen@id.wag-ur.nl

SO APMIS, (January, 2002) Vol. 110, No. 1, pp. 23-32. print. CODEN: APMSEL. ISSN: 0903-4641.

DT Article

LA English

ED Entered STN: 8 May 2002 Last Updated on STN: 8 May 2002

The pathogenesis of scrapie infection was studied in sheep carrying the PrpvRQ/PrpvRQ genotype, which is associated with a high susceptibility for natural scrapie. The sheep were killed at sequential time points during a scrapie infection covering both the early and late stages of scrapie pathogenesis. Various lymphoid and neural tissues were collected and immunohistochemically examined for the presence of the scrapie-associated \*\*\*prion\*\*\* protein PrPSc, a marker forscrapie infectivity. The first stage of scrapie infection consisted of invasion of the palatine tonsil and Peyer's patches of the caudal jejunum and ileum, the so-called gut-associated lymphoid tissues (GALT). At the same time, PrPSc was detected in the medial retropharyngeal lymph nodes draining the palatine tonsil and the mesenteric lymph nodes draining the jejunal and ileal Peyer's patches. From these initial sites of scrapic replication, the scrapie agent disseminated to other non-GALT-related lymphoid tissues. Neuroinvasion started in the enteric nervous system followed by retrograde spread of the scrapie agent via efferent parasympathetic and sympathetic nerve fibres innervating the gut, to the dorsal motor nucleus of the vagus in the medulla oblongata and the intermediolateral column of the thoracic spinal cord segments T8-T10, respectively.

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L10 ANSWER 4 OF 21 CABA COPYRIGHT 2004 CABI on STN
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AN 2001:79586 CABA

DN 20013069876

TI Inactivation of \*\*\*prions\*\*\* by rendering processes
Nachhaltige Tierproduktion

AU Schreuder, B. E. C.; Geertsma, R. E.; Keulen, L. J. M. van; Enthoven, P.;
Oberthur, R. C.; Koeijer, A. A. de; Osterhaus, A. D. M. E.; \*\*\*van\*\*\*

\*\*\* Keulen, L. J. M.\*\*\*; de Koeijer, A. A.; Kamphues, J. [EDITOR];
Flachowsky, G. [EDITOR]

CS Institute for Animal Science and Health (ID-Lelystad), P.O.Box 65, 8200 AB, Lelystad, Netherlands.

SO Landbauforschung Volkenrode, Sonderheft, (2001) No. 223, pp. 130-141. 23 ref.
Publisher: Bundesforschungsanstalt fur Landwirtschaft (FAL). Braunschweig Price: Journal article; Conference paper.
Meeting Info.: Animal nutrition - resources and future developments.
Workshop on Sustainable Animal Production, 15-16 June 2000, EXPO 2000, Hannover, Germany.

LΑ English ST. German Entered STN: 20010802 ED Last Updated on STN: 20010802 The present study assesses the efficacy of the procedures in use at AB rendering plants working with a hyperbaric system. The experiments were performed on a laboratory-scale using procedures simulating the pressure cooking part of the rendering procedures. As spike materials, a pool of BSE infected brain stem material from the UK and one of scrapie infected brain stem materials from Dutch sheep were used to spike rendering materials. These mixtures were subjected to various time-temperature combinations of hyperbaric heat treatment related to the Dutch rendering conditions in the early nineties, as well as to the combination of 20 minutes at 133 [deg]C indicated in the EU Directive on rendering of 1996. With the 20 min 133 [deg]C procedure, a reduction of BSE infectivity was observed of about 2.2 log in the first round (with some residual infectivity detected), and in the second round in excess of 2.0 log (no residual infectivity detected). Data obtained with undiluted brain material indicated an inactivation, in this form, of about 3.0 log (with some residual infectivity detected). With the same procedure, scrapie infectivity was reduced by more than 1.7 log in the first series and more than 2.2 log in the second series. Results with undiluted brain material indicated an inactivation, in this form, in excess of 3.1 log. In all three cases with the scrapie material, no residual infectivity was detected. Especially in processes with lower time-temperature exposure, the BSE agent consistently appeared more resistant to heat inactivation procedures than the scrapie agent. L10 ANSWER 5 OF 21 CAPLUS COPYRIGHT 2004 ACS on STN AN 2000:574024 CAPLUS DN 133:174276 test using guanidine thiocyanate for reducing false \*\*\*Prion\*\*\* тT positive test results Garssen, Gerrit Jan; Jacobs, Jorg Gunther; Langeveld, Joannes Pieter IN Maria; Smits, Marinus Adrianus; \*\*\*Van Keulen, Lucien Johannes\*\*\* Mattheus\*\*\* ; Schreuder, Bram Edward Cornelis; Bossers, Alexander PA Stichting Dienst Landbouwkundig Onderzoek, Neth. so PCT Int. Appl., 49 pp. CODEN: PIXXD2 DTPatent English T.A FAN.CNT 1 KIND DATE APPLICATION NO. PATENT NO. \_\_\_\_\_ ------WO 2000048003 A1 20000817 WO 2000-NL79 20000209 W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG A1 20011107 EP 2000-904139 20000209 EP 1151305 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO 19990211 PRAI EP 1999-200391 Α 20000209 WO 2000-NL79 W The invention is related to diagnostic methods for detecting transmissible spongiform encephalopathies (TSEs) such as BSE and scrapie and related disease in humans. The invention provides use of guanidine thiocyanate (gdnSCN) or a functional equiv. thereof for treating at least one sample derived from a mammal, including humans for reducing the risk of scoring a false-pos. test result in testing said sample for the presence or absence of aberrant \*\*\*prion\*\*\* protein. THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

ISSN: 0376-0723; ISBN: 3-933140-47-1

Germany, Federal Republic of

CY

DT

Journal

- L10 ANSWER 6 OF 21 CABA COPYRIGHT 2004 CABI on STN
- AN 2001:90149 CABA
- DN 20013068534
- TI Pathogenesis of natural scrapie in sheep Archives of Virology, Supplement 16
- AU Keulen, L. J. M. van; Schreuder, B. E. C.; Vromans, M. E. W.; Langeveld, J. P. M.; Smits, M. A.; \*\*\*van Keulen, L. J. M.\*\*\*; Groschup, M. H. [EDITOR]; Kretzschmar, H. [EDITOR]
- CS Institute for Animal Science and Health (ID-Lelystad), Edelhertweg 15, PO Box 65, NL-8200 AB Lelystad, Netherlands.
- SO Prion diseases: diagnosis and pathogenesis, (2000) pp. 57-71. 33 ref. Publisher: Springer-Verlag Wien. Wien ISBN: 3-211-83530-X
- CY Austria
- DT Book; Book Article
- LA English
- ED Entered STN: 20010906 Last Updated on STN: 20010906
- Although scrapie has been known for a long time as a natural disease of AB sheep and goats, the pathogenesis in its natural host still remains unclear. To study the pathogenesis of natural scrapie, we used immunohistochemistry to monitor the deposition of PrPSc in various tissues, collected during a natural scrapie infection from sheep with the PrPVRQ/PrPVRQ genotype which were purposely bred for their short incubation period for natural scrapie. PrPSc was present in the lymphoid tissues of all animals from the age of 5 months onwards. At this age, PrPSc was detected in the neural tissues only in the enteric nervous system (ENS) at the level of the duodenum and ileum. At the age of 10 months, PrPSc was not only found in the ENS but also in the ganglion mesentericum cranialis/coeliacum, the dorsal motor nucleus of the vagus, and the intermediolateral column of the thoracic segments T8-T10. PrPSc was detected for the first time in the nucleus tractus solitarius and ganglion nodosus at 17 months of age and in the ganglion trigeminale and several spinal ganglia at 21 months of age. Since the scrapie agent consists largely, if not entirely of PrPSc, these results indicate that the ENS acts as a portal of entry to the neural tissues for the scrapie agent followed by centripetal and retrograde spread through sympathetic and parasympathetic efferent fibres of the autonomic nervous system to the spinal cord and medulla oblongata respectively. PrPSc accumulation in sensory ganglia occurs after infection of the CNS and is therefore probably due to centrifugal and anterograde spread of the scrapie agent from the CNS through afferent nerve fibres.
- L10 ANSWER 7 OF 21 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN DUPLICATE 4
- AN 2001:430765 BIOSIS
- DN PREV200100430765
- TI Early accumulation of PrPSc in gut-associated lymphoid and nervous tissues of susceptible sheep from a Romanov flock with natural scrapie.
- AU Andreoletti, Olivier; Berthon, Patricia [Reprint author]; Marc, Daniel; Sarradin, Pierre; Grosclaude, Jeanne; \*\*\*van Keulen, Lucien\*\*\*; Schelcher, Francois; Elsen, Jean-Michel; Lantier, Frederic
- CS Laboratoire de Pathologie Infectieuse et Immunologie, INRA, F-37380, Nouzilly, France berthon@tours.inra.fr
- SO Journal of General Virology, (December, 2000) Vol. 81, No. 12, pp. 3115-3126. print.
  CODEN: JGVIAY. ISSN: 0022-1317.
- DT Article
- LA English
- ED Entered STN: 12 Sep 2001 Last Updated on STN: 22 Feb 2002
- The immune system is known to be involved in the early phase of scrapie pathogenesis. However, the infection route of naturally occurring scrapie and its spread within the host are not entirely known. In this study, the pathogenesis of scrapie was investigated in sheep of three PrP genotypes, from 2 to 9 months of age, which were born and raised together in a naturally scrapie-affected Romanov flock. The kinetics of PrPSc accumulation in sheep organs were determined by immunohistochemistry. PrPSc was detected only in susceptible VRQ/VRQ sheep, from 2 months of

age, with an apparent entry site at the ileal Peyer's patch as well as its draining mesenteric lymph node. At the cellular level, PrPSc deposits were associated with CD68-positive cells of the dome area and B follicles before being detected in follicular dendritic cells. In 3- to 6-month-old sheep, PrPSc was detected in most of the gut-associated lymphoid tissues (GALT) and to a lesser extent in more systemic lymphoid formations such as the spleen or the mediastinal lymph node. All secondary lymphoid organs showed a similar intensity of PrPSc-immunolabelling at 9 months of age. At this time-point, PrPSc was also detected in the autonomic myenteric nervous plexus and in the nucleus parasympathicus nervi X of the brain stem. These data suggest that natural scrapie infection occurs by the oral route via infection of the Peyer's patches followed by replication in the GALT. It may then spread to the central nervous system through the autonomic nervous fibres innervating the digestive tract.

- L10 ANSWER 8 OF 21 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. On STN DUPLICATE 5
- AN 2001:16897 BIOSIS
- DN PREV200100016897
- TI Diagnosis of bovine spongiform encephalopathy: A review.
- AU \*\*\*van Keulen, L. J. M.\*\*\* ; Langeveld, J. P. M.; Garssen, G. J.; Jacobs, J. G.; Schreuder, B. E. C.; Smits, M. A. [Reprint author]
- CS Institute for Animal Science and Health (ID-Lelystad), Edelhertweg 15, NL-8200 AB, Lelystad, Netherlands L.J.M.vanKeulen@id.wag-ur.nl
- SO Veterinary Quarterly, (October, 2000) Vol. 22, No. 4, pp. 197-200. print. CODEN: VEQUDU. ISSN: 0165-2176.
- DT Article
- General Review; (Literature Review)
- LA English
- ED Entered STN: 27 Dec 2000
  - Last Updated on STN: 27 Dec 2000
- Cows affected with bovine spongiform encephalopathy (BSE) display chronic AB neurological signs consisting of behavioural changes, abnormalities of posture and movement, and/or hyperaesthesia. At present, there are no laboratory test available to diagnose BSE in the live animal. In this article, we describe the post-mortem diagnostic examination of brains from BSE-suspected cattle as currently performed at ID-Lelystad. The routine laboratory diagnosis of BSE consists of histopathological examination of the brain and detection of the modified \*\*\*prion\*\*\* protein, PrPBSE, in brain tissue. These tests, however, have the disadvantage of being laborious and time consuming, so that results are available only after several days. Recently, at ID-Lelystad a new post-mortem test has been developed that enables screening of larger volumes of brain samples for PrpBSE within 1 day. This BSE test is especially suited for slaughterline monitoring. A preliminary validation study has shown that both sensitivity and specificity are 100% compared to the gold diagnostic standard of histopathology.
- L10 ANSWER 9 OF 21 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
- AN 2001:129849 BIOSIS
- DN PREV200100129849
- TI Pathogenesis of natural scrapie in sheep.
- AU \*\*\*van Keulen, L. J. M.\*\*\* [Reprint author]; Schreuder, B. E. C.; Vromans, M. E. W.; Langeveld, J. P. M.; Smits, M. A.
- CS Institute for Animal Science and Health (ID-Lelystad), Edelhertweg 15, NL-8200 AB, Lelystad, Netherlands
- SO Archives of Virology Supplement, (2000) No. 16, pp. 57-71. print. CODEN: AVISE9. ISSN: 0939-1983.
- DT Article
- LA English
- ED Entered STN: 14 Mar 2001
  - Last Updated on STN: 15 Feb 2002
- AB Although scrapie has been known for a long time as a natural disease of sheep and goats, the pathogenesis in its natural host still remains unclear. To study the pathogenesis of natural scrapie, we used immunohistochemistry to monitor the deposition of PrPSc in various tissues, collected during a natural scrapie infection from sheep with the PrPVRQ/PrPVRQ genotype which were purposely bred for their short incubation period for natural scrapie. PrPSc was present in the lymphoid

tissues of all animals from the age of 5 months onwards. At this age, PrPSc was detected in the neural tissues only in the enteric nervous system (ENS) at the level of the duodenum and ileum. At the age of 10 months, PrPSc was not only found in the ENS but also in the ganglion mesentericum cranialis/coeliacum, the dorsal motor nucleus of the vagus, and the intermediolateral column of the thoracic segments T8-T10. PrPSc was detected for the first time in the nucleus tractus solitarius and ganglion nodosus at 17 months of age and in the ganglion trigeminale and several spinal ganglia at 21 months of age. Since the scrapie agent consists largely, if not entirely of PrPSc, these results indicate that the ENS acts as a portal of entry to the neural tissues for the scrapie agent followed by centripetal and retrograde spread through sympathetic and parasympathetic efferent fibers of the autonomic nervous system to the spinal cord and medulla oblongata respectively. PrPSc accumulation in sensory ganglia occurs after infection of the CNS and is therefore probably due to centrifugal and anterograde spread of the scrapie agent from the CNS through afferent nerve fibers.

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L10 ANSWER 10 OF 21 SCISEARCH COPYRIGHT (c) 2004 The Thomson Corporation.
     on STN
AN
     2001:73376 SCISEARCH
     The Genuine Article (R) Number: 392PR
GΑ
TI
    Pathogenesis of natural scrapie in sheep
       ***van Keulen L J M (Reprint)*** ; Schreuder B E C; Vromans M E W;
ΑU
     Langeveld J P M; Smits M A
    Inst Anim Sci & Hlth, ID Lelystad, Edelhertweg 15, POB 65, NL-8200 AB
CS
     Lelystad, Netherlands (Reprint); Inst Anim Sci & Hlth, ID Lelystad,
     NL-8200 AB Lelystad, Netherlands
CYA Netherlands
    ARCHIVES OF VIROLOGY, (JAN 2000) Supp. [16], pp. 57-71.
     Publisher: SPRINGER-VERLAG WIEN, SACHSENPLATZ 4-6, PO BOX 89, A-1201
     VIENNA, AUSTRIA.
     ISSN: 0304-8608.
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- DT Article; Journal
- LA English

AΒ

- REC Reference Count: 33
  - \*ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS\*

Although scrapie has been known for a long time as a natural disease of sheep and goats, the pathogenesis in its natural host still remains unclear. To study the pathogenesis of natural scrapie, we used immunohistochemistry to monitor the deposition of PrPSc in various tissues, collected during a natural scrapie infection from sheep with the PrpvRQ/PrpvRQ genotype which were purposely bred for their short incubation period for natural scrapie. PrPSc was present in the lymphoid tissues of all animals from the age of 5 months onwards. At this age, PrPSc was detected in the neural tissues only in the enteric nervous system (ENS) at the level of the duodenum and ileum. At the age of 10 months, PrPSc was not only found in the ENS but also in the ganglion mesentericum cranialis/coeliacum, the dorsal motor nucleus of the vagus, and the intermediolateral column of the thoracic segments T8-T10. PrPSc was detected for the first time in the nucleus tractus solitarius and ganglion nodosus at 17 months of age and in the ganglion trigeminale and several spinal ganglia at 31 months of age. Since the scrapie agent consists largely, if not entirely of PrPSc, these results indicate that the ENS acts as a portal of entry to the neural tissues for the scrapie agent followed by centripetal and retrograde spread through sympathetic and parasympathetic efferent fibers of the autonomic nervous system to the spinal cord and medulla oblongata respectively. PrPSc accumulation in sensory ganglia occurs after infection of the CNS and is therefore probably due to centrifugal and anterograde spread of the scrapie agent from the CNS through afferent nerve fibers.

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L10 ANSWER 11 OF 21 CABA COPYRIGHT 2004 CABI on STN DUPLICATE 6
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- AN 2001:22588 CABA
- DN 20003020403
- TI Applicability of three anti-Prp peptide sera including staining of tonsils and brainstem of sheep with scrapie
- AU Garssen, G. J.; Keulen, L. J. M. van; Farquhar, C. F.; Smits, M. A.; Jacobs, J. G.; Bossers, A.; Meloen, R. H.; Langeveld, J. P. M.; \*\*\*van\*\*\* \*\*\* Keulen, L. J. M.\*\*\*
- CS Department of Molecular Recognition, Institute for Animal Science and

Health (ID-Lelystad), Lelystad, Netherlands.

SO Microscopy Research and Technique, (2000) Vol. 50, No. 1, pp. 32-39. 28

Publisher: Wiley-Liss. New York ISSN: 1059-910x

United States

CYDТ Journal

LΑ English

Entered STN: 20010302 ED

Last Updated on STN: 20010302

- Three rabbit antibodies (R521, R505, R524) were produced, and raised to AB synthetic peptides corresponding to residues 94-105, 100-111 and 223-234, respectively, of the sheep \*\*\*prion\*\*\* protein (PrP). Epitope mapping analysis revealed the monospecific character of antisera R505 and R524. In addition to the amino acid sequence against which it was raised, R521 also recognized other small epitopes. ELISA and radio-immunoprecipitation were used to assess the relative immunoreactivities of the antisera to the normal sheep \*\*\*prion\*\*\* protein (PrPc). Highest reactivity was found for R521, followed by R505 and R524. According to Western blot analysis, all three sera specifically reacted with the \*\*\*prion\*\*\* proteins PrPSc and PrP27-30, extracted from the brain stem of a scrapie-affected sheep. Yet, with R505 not all of the lower molecular weight deglycosylated forms could be detected. Contrary to the immunoreactivities found with the PrPSc and PrP27-30 isoforms, only R521 recognised PrPc from a healthy sheep. The usefulness of all three anti-peptide sera in the immunohistochemical detection of PrPSc in brain stem and tonsils of scrapie-affected sheep was demonstrated and compared with an established rabbit anti-PrP serum.
- L10 ANSWER 12 OF 21 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on DUPLICATE 7
- 1999:359362 BIOSIS AN
- DN PREV199900359362
- \*\*\*prion\*\*\* protein in the gastrointestinal tract TI Scrapie-associated of sheep with natural scrapie.
- AII \*\*\*van Keulen, L. J. M.\*\*\* [Reprint author]; Schreuder, B. E. C. [Reprint author]; Vromans, M. E. W. [Reprint author]; Langeveld, J. P. M.; Smits, M. A.
- Department of Pathobiology and Epidemiology, Institute for Animal Science CS and Health (ID-DLO), Edelhertweq 15, NL-8200 AB, Lelystad, Netherlands
- SO Journal of Comparative Pathology, (July, 1999) Vol. 121, No. 1, pp. 55-63. print. CODEN: JCVPAR. ISSN: 0021-9975.
- DT Article
- LA English
- Entered STN: 2 Sep 1999 ED
- Last Updated on STN: 2 Sep 1999
- AB The scrapie-associated \*\*\*prion\*\*\* protein (PrPSc), which is closely associated with scrapie infectivity, accumulates in the brain and lymphoid tissues of sheep with natural scrapie. The most probable portal of entry of the scrapie agent in sheep is the alimentary tract; little attention, however, has been paid to the gastro-intestinal tract in scrapie research. In this study, we examined the presence and distribution of PrPSc within the gastro-intestinal tract of sheep with natural scrapie and scrapie-negative sheep. It was found that PrPSc accumulated in the enteric nervous system (ENS) of all scrapie-infected sheep but not in scrapie-negative sheep. The distribution of PrPSc within the ENS was then studied along the entire gastro-intestinal tract in seven scrapie-infected sheep carrying various PrP genotypes. In sheep with the highest genetically determined susceptibility to scrapie, PrPSc was detected in the ENS from the oesophagus to the rectum. In sheep with a lower genetic susceptibility to scrapie, PrPSc was present in the ENS of the forestomachs, small intestine and large intestine but not in the oesophagus. In a scrapie-negative sheep with a PrP genotype associated with scrapie resistance, no PrPSc was seen in the ENS at any site along the gastro-intestinal tract. The presence of PrPSc within the ENS of scrapie-infected sheep indicates a possible role of the ENS in the pathogenesis of natural scrapie as a portal of entry to the central nervous system.

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AN 1998:112387 CABA
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- DN 19982210900
- TI Tonsillar biopsy and PrPSc detection in the preclinical diagnosis of scrapie
- AU Schreuder, B. E. C.; Keulen, L. J. M. van; Vromans, M. E. W.; Langeveld, J. P. M.; Smits, M. A.; \*\*\*Van Keulen, L. J. M.\*\*\*
- CS Institute for Animal Science and Health (ID-DLO) PO Box 65, 8200 AB Lelystad, Netherlands.
- SO Veterinary Record, (1998) Vol. 142, No. 21, pp. 564-568. 31 ref. ISSN: 0042-4900
- DT Journal
- LA English
- ED Entered STN: 19980714
  - Last Updated on STN: 19980714
- Preliminary findings have indicated that in naturally infected sheep, fully susceptible to scrapie (VRQ-homozygous), PrPSc can be detected in the tonsils approximately one year before the expected onset of clinical disease, whereas no immunostaining can be detected in animals with a semi-resistant genotype. This paper describes the technique for taking tonsillar biopsies from sheep. In another experiment PrPSc was detected even earlier in comparable VRQ-homozygous sheep born and raised in different surroundings. At three-and-a-half months of age no PrPSc could be detected in 3 homozygous susceptible sheep (VRQ/VRQ), but PrPSc was detected at 4 months in one similar sheep. At 8 months of age all 7 sampled VRQ/VRQ sheep showed positive immunostaining in the biopsies, but none of the biopsies from three VRQ/ARQ heterozygotes showed any immunostaining; they were positive when sampled at 14 to 15 months of age. Biopsies from VRQ/ARR sheep were negative throughout this period. On the basis of the established or expected incubation period, PrPSc could thus be detected in the tonsils of live susceptible animals at between one-third and a half of the incubation period, more than one-and-a-half years before clinical signs normally appear in both these genotypes.
- L10 ANSWER 14 OF 21 CAPLUS COPYRIGHT 2004 ACS on STN
- AN 1997:679268 CAPLUS
- DN 127:316560
- TI Method for the detection of \*\*\*prion\*\*\* diseases
- PA Instituut voor Dierhouderij en Diergezondheid (Id-Dlo), Neth.; Schreuder, Bram Edward Cornelis; Van Keulen, Lucius Johannes Mattheus; Vromans, Maria Elisabeth Wilhelmina; Langeveld, Johannes Pieter Maria; Smits, Marinus Adrianus
- SO PCT Int. Appl., 29 pp.
  - CODEN: PIXXD2
- DT Patent
- LA English
- FAN.CNT

FAN.	CNT	1																	
	PAT	ATENT NO.				KIND DATE			APPLICATION NO.										
										<b>-</b> -									
ΡI	WO	9737	227			A1 19971009		WO 1997-NL166					19970402						
		W:	AL,	AM,	AT,	AU,	ΑZ,	ВA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,	
			DK,	EE,	ES,	FΙ,	GB,	GE,	GH,	HU,	IL,	ıs,	JP,	KΕ,	KG,	ΚP,	KR,	KΖ,	
			LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,	PL,	
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			ML,	MR,	NE,	SN,	TD,	TG											
	CA	A 2250800			AA 19971009			CA 1997-2250800						19970402					
	ΑU	7 9721808			A1 19971022				AU 1997-21808						19970402				
	ΑU	713529			B2 19991202														
	$\mathbf{EP}$	P 891552		A1 19990120			EP 1997-914658						19970402						
	EΡ	891552			B1 20030402														
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			ΙE,	SI,	LT,	LV,	FI,	RO											
	BR	9708	421			Α		1999	0803		BR 1	997-	8421			1	9970	402	
	NZ	3321	32			Α		2000	0228		NZ 1	997-	3321	32		1	9970	402	
	JP	2000	5055	59		T2	72 20000509				JP 1997-535157						19970402		
	JP	3333	213			B2		2002	1015										

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AT 236407 E 20030415 AT 1997-914658 19970402
NO 9804602 A 19981203 NO 1998-4602 19981001
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PRAI EP 1996-200917 A 19960403 WO 1997-NL166 W 19970402

- AB The invention provides methods for the detection of \*\*\*prion\*\*\*
  diseases, such as scrapie of sheep, bovine spongiform encephalopathy of
  cattle, Creutzfeld-Jacob disease of man, whereby aberrant proteins or
  \*\*\*prion\*\*\* proteins are detected in tissues which can be sampled from
  live animals. Peptides such as segments of the scrapie protein can be
  used to raise antibodies for use in immunoassays of lymphoid tissues such
  as the tonsils.
- L10 ANSWER 15 OF 21 CABA COPYRIGHT 2004 CABI on STN
- AN 97:153958 CABA
- DN 19972216710
- TI Control of scrapie eventually possible?
- AU Schreuder, B. E. C.; Keulen, L. J. M. van; Smits, M. A.; Langeveld, J. P. M.; Stegeman, J. A.; \*\*\*Van Keulen, L. J. M.\*\*\*
- CS DLO-Institute for Animal Science and Health (IDO-DLO), Research Head Office, P.O. Box 65, 8200 AB Lelystad, Netherlands.
- SO Veterinary Quarterly, (1997) Vol. 19, No. 3, pp. 105-113. 43 ref. ISSN: 0165-2176
- DT Journal
- LA English
- ED Entered STN: 19971211 Last Updated on STN: 19971211
- L10 ANSWER 16 OF 21 CABA COPYRIGHT 2004 CABI on STN
- AN 96:130399 CABA
- DN 19962212842
- TI Preclinical test for \*\*\*prion\*\*\* diseases
- AU Schreuder, B. E. C.; Keulen, L. J. M. van; Vromans, M. E. W.; Langeveld, J. P. M.; Smits, M. A.; \*\*\*Van Keulen, L. J. M.\*\*\*
- CS DLO-Institute for Animal Science and Health (ID-DLO), PO Box 65, 8200 AB Lelystad, Netherlands.
- SO Nature (London), (1996) Vol. 381, No. 6583, pp. 563. 10 ref. ISSN: 0028-0836
- DT Letter
- LA English
- ED Entered STN: 19961015
  - Last Updated on STN: 19961015
- AB Tonsillar samples were taken from ten 9.5- to 10-month-old lambs, born and maintained on a farm infected with scrapie. None of the sheep showed clinical signs of the disease. However, extensive PrPSc (an altered protein associated with \*\*\*prion\*\*\* encephalopathies) immunostaining was found in these biopsies from 6 susceptible sheep with the genotype PrPVQ/VQ. PrPSc was not detected in the other sheep which were of the resistant genotype PrPVQ/AR. It is concluded that screening tonsillar tissue for PrPSc by immunohistochemistry offers a potential method of preclinical diagnosis of scrapie in sheep.
- L10 ANSWER 17 OF 21 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN DUPLICATE 8
- AN 1996:270052 BIOSIS
- DN PREV199698826181
- TI Immunohistochemical detection of \*\*\*prion\*\*\* protein in lymphoid tissues of sheep with natural scrapie.
- AU \*\*\*Van Keulen, L. J. M.\*\*\* [Reprint author]; Schreuder, B. E. C.; Meloen, R. H.; Mooij-Harkes, G.; Vromans, M. E. W.; Langeveld, J. P. M.
- CS Dep. Pathobiol. Epidemiol., Inst. Anim. Sci. Health, PO Box 65, 8200 AB Lelystad, Netherlands
- SO Journal of Clinical Microbiology, (1996) Vol. 34, No. 5, pp. 1228-1231. CODEN: JCMIDW. ISSN: 0095-1137.
- DT Article
- LA English
- ED Entered STN: 10 Jun 1996
  - Last Updated on STN: 10 Jun 1996
- AB The scrapie-associated form of the \*\*\*prion\*\*\* protein (PrP-Sc) accumulates in the brain and lymphoid tissues of sheep with scrapie. In order to assess whether detecting PrP-Sc in lymphoid tissue could be used as a diagnostic test for scrapie, we studied the localization and

distribution of PrP-Sc in various lymphoid tissues collected at necropsy from 55 sheep with clinical scrapie. Samples collected from the spleen, palatine tonsil, ileum, and five different lymph nodes were immunohistochemically stained for PrP-Sc cntdot PrP-Sc was found to be deposited in a reticular pattern in the center of both primary and secondary lymphoid follicles. In addition, granules of PrP-Sc were seen in the cytoplasm in macrophages associated with the lymphoid follicles. In 54 (98%) of the 55 scrapie-affected sheep, PrP-Sc was detected in the spleen, retropharyngeal lymph node, mesenteric lymph node, and the palatine tonsil. However, only in the palatine tonsils was PrP-Sc present in a consistently high percentage of the lymphoid follicles. PrP was not detected in any of the lymphoid tissues of 12 sheep that had no tonsils are the best-suited lymphoid tissue to be biopsied for the detection of PrP-Dc in the diagnosis of clinical scrapie in living sheep.

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neurohistopathological signs of a scrapie infection. We conclude that the
L10 ANSWER 18 OF 21 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 9
    1996:358658 CAPLUS
    Preclinical test for
                           ***prion***
                                        diseases
                          ***van Keulen, L. J. M. *** ; Vromans, M. E. W.;
    Schreuder, B. E. C.;
    Langeveld, J. P. M.; Smits, M. A.
    DLO-Inst. Anim. Sci. Health, Leylstad, 8200 AB, Neth.
    Nature (London) (1996), 381(6583), 563
    CODEN: NATUAS; ISSN: 0028-0836
    Macmillan Magazines
    Journal; Letter
    English
    Unavailable
L10 ANSWER 19 OF 21 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED.
    on STN
    96182917 EMBASE
    1996182917
    Preclinical test for ***prion***
                                        diseases [2].
                        ***Van Keulen L.J.M.*** ; Vromans M.E.W.; Langeveld
    Schreuder B.E.C.;
    J.P.M.; Smits M.A.
    DLO-Inst Animal Sci Health (ID-DLO), PO Box 65,8200 AB Lelystad,
    Netherlands
    Nature, (1996) 381/6583 (563).
    ISSN: 0028-0836 CODEN: NATUAS
    United Kingdom
    Journal; Letter
     004
            Microbiology
    800
            Neurology and Neurosurgery
    English
L10 ANSWER 20 OF 21 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED.
    on STN
    96328470 EMBASE
    1996328470
    [ ***Prion***
                    diseases of humans and animals].
        ***PRIONZIEKTEN*** BIJ MENSEN EN DIEREN.
     Smits M.A.; Schreuder B.E.C.; ***Van Keulen L.J.M.*** ; Langeveld
    ID-DLO, Postbus 65,8200 AB Lelystad, Netherlands
    Nederlands Tijdschrift voor Medische Microbiologie, (1996) 4/2 (30-34).
     ISSN: 0929-0176 CODEN: NMMIEB
    Netherlands
    Journal; Article
            Microbiology
     004
     Dutch
     Dutch: English
     In the recent years important progress has been made in the research on
                  diseases. Nevertheless there are important gaps in our
     knowledge on ***prion*** diseases. The nature of the infectious agent
     is unknown, insight into the risk factors is limited, the possibilities to
     diagnose ***prion*** diseases are not adequate, and there are no
     therapeutic approaches available. The lack of sufficient scientific
     knowledge has contributed to the mad cow disease crisis in March this
     year.
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L10 ANSWER 21 OF 21 CABA COPYRIGHT 2004 CABI on STN
AN
     95:132740 CABA
DN
     19952210471
     Immunohistochemical detection and localization of
                                                        ***prion***
     in brain tissue of sheep with natural scrapie
ΑU
     Keulen, L. J. M. van; Schreuder, B. E. C.; Meloen, R. H.; Berg, M. P. van
    den; Mooij-Harkes, G.; Vromans, M. E. W.; Langeveld, J. P. M.;
         Keulen, L. J. M. *** ; Van den Berg, M. P.
   Department of Pathobiology, Central Veterinary Institute, Institute for
CS
     Animal Science and Health (ID-DLO), 8200 AB Lelystad, Netherlands.
SO
     Veterinary Pathology, (1995) Vol. 32, No. 3, pp. 299-308. 35 ref.
     ISSN: 0300-9858
DT
     Journal
    English
T.A
     Entered STN: 19950724
     Last Updated on STN: 19950724
     Tissue samples from the brains of 50 sheep with natural scrapie and 20
AB
     sheep without histopathological signs of scrapie were treated with formic
     acid and hydrated autoclaving. A scrapie-associated cellular ***prion***
     protein (PrPSC) was detected using an antipeptide antisera. PrPSC was
     located in the brains of all sheep with scrapie; no immunostaining
     occurred in sheep without scrapie. PrPSC that did not stain for amyloid
     was present in the cytoplasm and at the cell membrane of neurons and
     astrocytes. Large amounts of PrPSC were seen at the cell membrane of
     neurons in the medulla oblongata and pons, whereas PrPSC accumulated at
     the cell membrane of astrocytes of the glial limitans in all brain
     regions. PrPSC that stained for amyloid was located in the walls of blood
     vessels and perivascularly in the brains of 64% of the sheep. No apparent
     topographic relationship existed between PrPSC that stained for amyloid
     and PrPSC accumulation associated with neurons or astrocytes. In all
     scrapie-affected sheep PrPSC was present in brain regions with
     vacuolation, but it could also be detected in regions with little or no
     vacuolation.
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              8 DUP REM L11 (3 DUPLICATES REMOVED)
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=> d bib ab 1-
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L12 ANSWER 1 OF 8 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
     DUPLICATE 1
     2004:143248 BIOSIS
AN
DN
     PREV200400143547
     Quantifying BSE control by calculating the basic reproduction ratio RO for
     the infection among cattle.
     de Koeijer, Aline [Reprint Author]; Heesterbeek, Hans [Reprint Author];
       ***Schreuder, Bram*** [Reprint Author]; Oberthuer, Radulf; Wilesmith,
     John; van Roermund, Herman [Reprint Author]; de Jong, Mart [Reprint
```

Institute for Animal Science and Health, ID-Lelystad, 6200 AB, P.O. Box

CS

65, Lelystad, Netherlands a.a.dekoeijer@id.dlo.nl

- Journal of Mathematical Biology, (January 2004) Vol. 48, No. 1, pp. 1-22.
  print.
  ISSN: 0303-6812.
- DT Article
- LA English
- ED Entered STN: 10 Mar 2004 Last Updated on STN: 10 Mar 2004
- AB The safety of using meat and bone meal (MBM) in mammal feed was studied in view of BSE, by quantifying the risk of BSE transmission through different infection routes. This risk is embodied in the basic reproduction ratio RO of the infection, i.e. the average number of new infections induced by one initial infection. Only when RO is below 1, will the disease die out with certainty and the population will become free from BSE.

  Unfortunately this is a slow process due to the slow progression of the disease. We calculate RO explicitly from basic ingredients taking several different transmission routes into account. Several of the basic ingredients are functions of age or of infection-age. We also calculate the exponential growth rate r in terms of the same basic ingredients. Next we quantify the ingredients from available data and compute the effects on RO of various scenario's for controlling BSE, with examples for the UK and the Netherlands.
- L12 ANSWER 2 OF 8 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
- AN 2003:100080 BIOSIS
- DN PREV200300100080
- TI Factors that influence the age distribution of BSE cases: Potentials for age targeting in surveillance.
- AU De Koeijer, Aline [Reprint Author]; \*\*\*Schreuder, Bram\*\*\*; Bouma, Annemarie
- CS Division of Infectious Diseases and Food Chain Quality, Institute for Animal Science and Health (ID-Lelystad), 8200 AB, P.O. Box 65, Lelystad, Netherlands a.a.dekoeijer@id.wag-ur.nl
- SO Livestock Production Science, (September 2002) Vol. 76, No. 3, pp. 223-233. print.
- ISSN: 0301-6226 (ISSN print).
- DT Article
- LA English
- ED Entered STN: 19 Feb 2003 Last Updated on STN: 19 Feb 2003
- Recently, due to consumers fears concerning BSE and vCJD, the need arose for methods to detect BSE, to estimate the present prevalence of BSE among cattle and to predict future BSE prevalence. As a part of that set of urgent questions, it has become important to indicate groups in which BSE risk is higher or lower. One of the well-known risk factors for BSE is age: very young animals do not develop the disease, and very old animals are less likely to develop the disease. Using age-structured modelling, three factors influencing the age distribution of BSE were found to be important: (1) the incubation period of BSE, (2) age structure of the cattle population, and (3) the local risk history (methods of rendering, feeding of compound feed containing Meat and Bone Meal (MBM), and the development of BSE control). The EU has considered these three risk factors to be the most important for BSE risk assessment. So far, this EU risk assessment method has been proven right by several countries detecting BSE after being classified as 'BSE is most likely present here'. The age distribution of BSE seems to vary a lot between countries and regions. When information on these three factors is available, the expected age distribution of BSE in different countries can be calculated. Our calculations show that in countries where, until very recently, the reproduction ratio was high, (i.e., BSE risk factors were high), the BSE prevalence is expected to be highest in 4-year-old cattle. In countries with low reproduction ratio for BSE, (i.e., BSE control at a very high level) for more than 5 years, the prevalence will be highest in the 6-8-year-old cattle. Thus, surveillance could be targeted specifically at the age groups with the highest BSE risk. For each country, a short assessment shows in which age group BSE is most likely to be found.

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DN
    133:174276
    Prion test using quanidine thiocyanate for reducing false positive test
    results
    Garssen, Gerrit Jan; Jacobs, Jorg Gunther; Langeveld, Joannes Pieter
    Maria; Smits, Marinus Adrianus; Van Keulen, Lucien Johannes Mattheus;
      ***Schreuder, Bram Edward Cornelis*** ; Bossers, Alexander
    Stichting Dienst Landbouwkundig Onderzoek, Neth.
PΑ
so
    PCT Int. Appl., 49 pp.
    CODEN: PIXXD2
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    Patent
    English
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                        A1 20000817 WO 2000-NL79
    WO 2000048003
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            IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
            MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
            SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM,
            AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
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     EP 1151305
                        A1 20011107 EP 2000-904139
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO
PRAI EP 1999-200391
                        Α
                               19990211
                              20000209
    WO 2000-NL79
    The invention is related to diagnostic methods for detecting transmissible
     spongiform encephalopathies (TSEs) such as BSE and scrapie and related
     disease in humans. The invention provides use of guanidine thiocyanate
     (qdnSCN) or a functional equiv. thereof for treating at least one sample
     derived from a mammal, including humans for reducing the risk of scoring a
     false-pos. test result in testing said sample for the presence or absence
     of aberrant prion protein.
            THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT 4
             ALL CITATIONS AVAILABLE IN THE RE FORMAT
L12 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
    1997:679268 CAPLUS
ΔN
DN
     127:316560
    Method for the detection of prion diseases
TΙ
      ***Schreuder, Bram Edward Cornelis*** ; Van Keulen, Lucius Johannes
     Mattheus: Vromans, Maria Elisabeth Wilhelmina; Langeveld, Johannes Pieter
     Maria; Smits, Marinus Adrianus
    Instituut voor Dierhouderij en Diergezondheid (Id-Dlo), Neth.; Schreuder,
     Bram Edward Cornelis; Van Keulen, Lucius Johannes Mattheus; Vromans, Maria
     Elisabeth Wilhelmina; Langeveld, Johannes Pieter Maria; Smits, Marinus
     Adrianus
    PCT Int. Appl., 29 pp.
     CODEN: PIXXD2
DΤ
     Patent
    English
LΑ
FAN.CNT 1
                        KIND DATE
                                          APPLICATION NO.
    PATENT NO.
                                                                DATE
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                               19971009 WO 1997-NL166
                        A1
                                                                19970402
        W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
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            LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL,
            PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ,
            VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
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            ML, MR, NE, SN, TD, TG
                                           CA 1997-2250800
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     AU 9721808
                               19971022
                                         AU 1997-21808
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                         A1
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     AU 713529
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                        A1
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    JP 3333213
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                                                                 19970402
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                                          AT 1997-914658
                         E.
                                                                 19981001
                                          NO 1998-4602
    NO 9804602
                         Α
                               19981203
PRAI EP 1996-200917
                               19960403
                         Α
    WO 1997-NL166
                         W
                               19970402
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- AB The invention provides methods for the detection of prion diseases, such as scrapie of sheep, bovine spongiform encephalopathy of cattle, Creutzfeld-Jacob disease of man, whereby aberrant proteins or prion proteins are detected in tissues which can be sampled from live animals. Peptides such as segments of the scrapie protein can be used to raise antibodies for use in immunoassays of lymphoid tissues such as the
- L12 ANSWER 5 OF 8 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN DUPLICATE 2
- AN 1996:526174 BIOSIS
- DN PREV199699248530
- TI PrP genotype contributes to determining survival times of sheep with natural scrapie.
- AU Bossers, Alex; \*\*\*Schreuder, Bram E. C.\*\*\*; Muileman, Ida H.; Belt, Peter B. G. M.; Smits, Mari A. [Reprint author]
- CS Dep. Bacteriol., DLO-Inst. Anim. Sci. Health, P.O. Box 65, 8200 AB Lelystad, Netherlands
- SO Journal of General Virology, (1996) Vol. 77, No. 10, pp. 2669-2673. CODEN: JGVIAY. ISSN: 0022-1317.
- DT Article
- LA English
- ED Entered STN: 22 Nov 1996 Last Updated on STN: 22 Nov 1996
- AB Several allelic variants of the sheep PrP gene are associated with scrapie susceptibility. However, it is not known whether, and to what extent, the PrP genotype contributes to determining survival times of scrapie sheep. We therefore determined the PrP genotype and life spans of over 50 Flemish and Swifter sheep within a single scrapie-affected flock. Eighty-three per cent of the scrapie sheep were homozygous for the PrPvQ allele (polymorphic amino acids at codons 136 and 171 are indicated) and these sheep died from scrapie at a mean age of 25 months. In sheep heterozygous for PrP-VQ, development of scrapie was delayed or did not occur. Sheep with at least one PrP-AR allele, including PrP-VQ/PrP-AR sheep, did not develop scrapie. No scrapie sheep were found without a PrP-VQ allele. We conclude that the PrP genotype contributes to determining survival times of sheep with natural scrapie. Additionally, we describe two novel sheep PrP allelic variants.
- L12 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
- AN 1997:593179 CAPLUS
- DN 127:246402
- TI PrP allelic variants associated with natural scrapie
- AU Belt, Peter B. G. M.; Bossers, Alex; \*\*\*Schreuder, Bram E. C.\*\*\*; Smits, Mari A.
- CS Department of Bacteriology, Institute for Animal Science and Health (ID-DLO), Lelystad, Neth.
- Bovine Spongiform Encephalopathy: The BSE Dilemma, [Proceedings of the International Workshop on Bovine Spongiform Encephalopathy: The BSE Dilemma], 6th, Williamsburg, Va., Feb. 26-Mar. 1, 1995 (1996), 294-305. Editor(s): Gibbs, Clarence J. Publisher: Springer, New York, N. Y. CODEN: 64ZIAF
- DT Conference
- LA English
- AB The PrP allelic variants of 69 scrapie-affected and 176 healthy sheep by denaturing gradient gel electrophoresis (DGGE) were detd. The results indicated that specific combinations of polymorphisms within the PrP gene of sheep, rather that single polymorphisms, are assocd. with the incidence of scrapie. A pos. selection for the PrPARR allele and/or a neg. selection for the PrPVRQ in breeding programs could help to control natural scrapie.

- L12 ANSWER 7 OF 8 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. On STN DUPLICATE 3
- AN 1995:205822 BIOSIS
- DN PREV199598220122
- TI Identification of five allelic variants of the sheep PrP gene and their association with natural scrapie.
- AU Belt, Peter B. G. M. [Reprint author]; Muileman, Ida H.; \*\*\*Schreuder,\*\*\*

  \*\*\* Bram E. C.\*\*\*; Ruijter, Judy Bos-De; Gielkens, Arno L. J.; Smits, Mari
  A.
- CS Dep. Mol. Biol., DLO-Inst. Anim. Sci. Health, Edelhertweg 15, 8219 PH Lelystad, Netherlands
- SO Journal of General Virology, (1995) Vol. 76, No. 3, pp. 509-517. CODEN: JGVIAY. ISSN: 0022-1317.
- DT Article
- LA English
- ED Entered STN: 23 May 1995
  - Last Updated on STN: 23 May 1995
- Scrapie is a fatal neurodegenerative disease of sheep that belongs to the group of prion diseases found in humans and animals. The host encoded prion protein (PrP) plays a central role in the disease process. In the Prp genes of man, mice and sheep, polymorphisms have been found that are associated with disease susceptibility and pathogenesis. We have used denaturing gradient gel electrophoresis (DGGE) to detect polymorphisms in the sheep PrP gene. In addition to the already described polymorphisms at codons 136, 154 and 171, we identified a hitherto unknown G fwdarw T transition at codon 171. This transition is responsible for a glutamine to histidine substitution. An arginine to glutamine substitution at this position has been described previously. DGGE allowed us to identify five different combinations of these polymorphisms within the PrP gene representing five allelic variants, which were cloned and sequenced. Based on the triplet sequences present at codons 136, 154 and 171 these allelic variants were designated PrP-VRQ, PrP-ARR, PrP-ARQ, PrP-ARH and Prp-AHQ. To determine the association of these allelic variants with natural scrapie, we screened 34 scrapie affected and 91 healthy control sheep of the Texel breed for the presence of these allelic variants. In these two groups, the five variants gave rise to 13 different genotypes. The distribution of the allelic variants among both groups showed marked differences. The PrP-VRQ variant was present with high frequency in scrapie affected sheep, whereas the PrP-ARR variant was almost exclusively present in the healthy group. Two other variants, PrP-ARQ and PrP-ARH, were found in both groups with equal frequencies. The data obtained suggest modulation of disease susceptibility in these Texel sheep by at least five different PrP allelic variants, with the PrP-VRQ and PrP-ARR alleles acting in a dominant, but opposite fashion over the PrP-ARQ and PrP-ARH alleles. The frequency of the PrP-AHQ variant was too low to draw any conclusions.
- L12 ANSWER 8 OF 8 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
- AN 1994:212451 BIOSIS
- DN PREV199497225451
- TI BSE agent hypotheses.
- AU \*\*\*Schreuder, Bram E. C.\*\*\*
- CS DVM, DLO-Central Vet. Inst., P.O. Box 65, 8200 AB Lelystad, Netherlands
- SO Livestock Production Science, (1994) Vol. 38, No. 1, pp. 23-33. CODEN: LPSCDL. ISSN: 0301-6226.
- DT Article
- LA English
- ED Entered STN: 10 May 1994
  - Last Updated on STN: 10 May 1994
- Although the oldest known form of transmissible spongiform encephalopathy (TSE), scrapie in sheep, has been described as early as in 1732, the nature of the agents causing TSEs still remains an enigma. Unusual properties of the agents, such as extreme resistance against UV, ionizing radiation, and dry heat, already led to the term "unconventional virus". From the number of hypotheses on the nature of these agents postulated, we will consider here three major ones only: virus, virius and prion. Present schools of thought, however, confine themselves mainly to the last two hypotheses. A recently formulated unified theory tries to reconcile the essentials of these two hypotheses. The virino hypothesis was called upon essentially to explain the variability in scrapie isolates when

passaged in experimental rodents. Nucleic acids in a micro-organism would form the obvious explanation for such variability, but they have not been identified to date, even by using promising modem recombinant DNA methodologies. Research supporting the prion hypothesis has progressed steadily since its formulation. There was the discovery of the so-called prion protein (PrP), encoded by a single host gene. This PrP-gene is transcribed both in scrapie-infected animals and in normal animals. The resulting prion protein in its normal form was designated PrP-C, meaning cellular PrP. The abnormal form, found in infected animals only, was designated PrP-Sc, meaning scrapie PrP. The isoforms are not identical, though they seem to have the same primary structure. Supporters of both the virino and the prion hypothesis equally accept that PrP is a key element in the pathogenesis of these diseases. Proposed models, involving the conversion of the normal PrP-C into PrP-Sc as part of the pathogenesis, will be discussed. Further experimental support for the prion theory has recently been obtained through work with transgenic animals.

```
=> e bossers alexander/au
            7
                  BOSSERS A M/AU
E2
            15
                   BOSSERS ALEX/AU
            1 --> BOSSERS ALEXANDER/AU
E3
                  BOSSERS ANN/AU
E4
             1
                   BOSSERS B/AU
E5
            21
                  BOSSERS BERNADETTE/AU
            6
E6
                   BOSSERS CHRIS F/AU
E7
            4
                   BOSSERS G T/AU
E8
             5
                  BOSSERS G T M/AU
            10
E9
                  BOSSERS J M/AU
E10
            1
             2
                   BOSSERS P A/AU
E11
                   BOSSERS PIETER A/AU
E12
             1
=> s e1-e3 and prion?
            16 ("BOSSERS A M"/AU OR "BOSSERS ALEX"/AU OR "BOSSERS ALEXANDER"/AU
L13
               ) AND PRION?
=> dup rem 113
PROCESSING COMPLETED FOR L13
              9 DUP REM L13 (7 DUPLICATES REMOVED)
L14
=> d bib ab 1-
YOU HAVE REQUESTED DATA FROM 9 ANSWERS - CONTINUE? Y/(N):Y
L14 ANSWER 1 OF 9 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
     DUPLICATE 1
     2004:77483 BIOSIS
MΔ
    PREV200400079379
    Enzymatic degradation of ***prion*** protein in brain stem from
     infected cattle and sheep.
    Langeveld, Jan P. M. [Reprint Author]; Wang, Jeng-Jie; van de Wiel, Dick
     F. M.; Shih, Giles C.; Garssen, G. Jan; ***Bossers, Alex***; Shih,
     Jason C. H.
    Central Institute for Animal Disease Control, 8203 AA, PO Box 2004,
CS
     Lelystad, Netherlands
     jan.langeveld@wur.nl
     Journal of Infectious Diseases, (1 December 2003) Vol. 188, No. 11, pp.
     1782-1789. print.
     CODEN: JIDIAQ. ISSN: 0022-1899.
     Article
DT
LΑ
     English
ED
     Entered STN: 4 Feb 2004
     Last Updated on STN: 4 Feb 2004
       ***Prions*** -infectious agents involved in transmissible spongiform
     encephalopathies-normally survive proteolytic and mild protein-destructive
     processes. Using bacterial keratinase produced by Bacillus licheniformis
     strain PWD-1, we tested conditions to accomplish the full degradation of
        ***prion*** protein (PrP) in brain-stem tissue from animals with bovine
     spongiform encephalopathy and scrapie. The detection of PrPSc, the
     disease-associated isoform of PrP, in homogenates was done by Western blotting and various antibodies. The results indicated that only in the
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presence of detergents did heat pretreatment at >100degreeC allow the extensive enzymatic breakdown of PrPSc to a state where it is immunochemically undetectable. Proteinase K and 2 other subtilisin proteases, but not trypsin and pepsin, were also effective. This enzymatic process could lead to the development of a method for the decontamination of medical and laboratory equipment. The ultimate effectiveness of this method of \*\*\*prion\*\*\* inactivation has to be tested in mouse bioassays.

L14 ANSWER 2 OF 9 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN

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DUPLICATE 2
    2003:248861 BIOSIS
AN
    PREV200300248861
DN
                                    ***prion*** protein into pathologic
    In vitro conversion of normal
TΙ
    isoforms.
      ***Bossers, Alex*** [Reprint Author]; Rigter, Alan; de Vries, Ruth;
ΑU
    Smits, Mari A.
    Central Institute for Animal Disease Control (CIDC-Lelystad), Edelhertweg
CS
    15, 8219 PH, Lelystad, Netherlands
    a.bossers@id.dlo.nl
    Clinics in Laboratory Medicine, (March 2003) Vol. 23, No. 1, pp. 227-247.
    print.
    ISSN: 0272-2712.
    Article
DT
    General Review; (Literature Review)
    English
LA
    Entered STN: 21 May 2003
ED
    Last Updated on STN: 21 May 2003
L14 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN
    2000:574024 CAPLUS
AN
DN
    133:174276
      ***Prion***
                    test using guanidine thiocyanate for reducing false
TI
     positive test results
     Garssen, Gerrit Jan; Jacobs, Jorg Gunther; Langeveld, Joannes Pieter
IN
    Maria; Smits, Marinus Adrianus; Van Keulen, Lucien Johannes Mattheus;
     Schreuder, Bram Edward Cornelis; ***Bossers, Alexander***
     Stichting Dienst Landbouwkundig Onderzoek, Neth.
PΑ
     PCT Int. Appl., 49 pp.
     CODEN: PIXXD2
DT
     Patent
    English
LA
FAN.CNT 1
                        KIND DATE
                                           APPLICATION NO.
                                                                 DATE
    PATENT NO.
     _____
                               _ _ - - - - -
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                                                                  20000209
     WO 2000048003
                        A1
                               20000817
                                           WO 2000-NL79
         W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
             CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
             IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
             MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
             SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
             DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
             CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                         A1 20011107
                                         EP 2000-904139
     EP 1151305
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
PRAI EP 1999-200391
                          Α
                                19990211
     WO 2000-NL79
                          W
                                20000209
     The invention is related to diagnostic methods for detecting transmissible
     spongiform encephalopathies (TSEs) such as BSE and scrapie and related
     disease in humans. The invention provides use of guanidine thiocyanate
     (gdnSCN) or a functional equiv. thereof for treating at least one sample
     derived from a mammal, including humans for reducing the risk of scoring a
     false-pos. test result in testing said sample for the presence or absence
     of aberrant ***prion***
                                protein.
              THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT 4
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
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DUPLICATE 3 ΑN 2000:106273 BIOSIS PREV200000106273 DN Susceptibility of sheep for scrapie as assessed by in vitro conversion of ΤI nine naturally occurring variants of PrP. \*\*\*Bossers, Alex\*\*\* ; de Vries, Ruth; Smits, Mari A. [Reprint author] ΑU Institute for Animal Science and Health, Lelystad, Netherlands CS Journal of Virology, (Feb., 2000) Vol. 74, No. 3, pp. 1407-1414. print. SO CODEN: JOVIAM. ISSN: 0022-538X. DT Article LΑ English Entered STN: 22 Mar 2000 ED Last Updated on STN: 3 Jan 2002 protein (PrP) gene are associated Polymorphisms in the \*\*\*prion\*\*\* with phenotypic expression differences of transmissible spongiform encephalopathies in animals and humans. In sheep, at least 10 different mutually exclusive polymorphisms are present in PrP. In this study, we determined the efficiency of the in vitro formation of protease-resistant Prp of nine sheep PrP allelic variants in order to gauge the relative susceptibility of sheep for scrapie. No detectable spontaneous protease-resistant PrP formation occurred under the cell-free conditions used. All nine host-encoded cellular PrP (PrPC) variants had distinct conversion efficiencies induced by PrPSc isolated from sheep with three different homozygous PrP genotypes. In general, PrP allelic variants with polymorphisms at either codon 136 (Ala to Val) or codon 141 (Leu to Phe) and phylogenetic wild-type sheep PrPC converted with highest efficiency to protease-resistant forms, which indicates a linkage with a high susceptibility of sheep for scrapie. PrPC variants with polymorphisms at codons 171 (Gln to Arg), 154 (Arg to His), and to a minor extent 112 (Met to Thr) converted with low efficiency to protease-resistant isoforms. This finding indicates a linkage of these alleles with a reduced susceptibility or resistance for scrapie. In addition, PrPSc with the codon 171 (Gln-to-His) polymorphism is the first variant reported to induce higher conversion efficiencies with heterologous rather than homologous PrP variants. The results of this study strengthen our views on polymorphism barriers and have further implications for scrapic control programs by breeding strategies. L14 ANSWER 5 OF 9 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN DUPLICATE 4 ΑN 1997:260741 BIOSIS PREV199799567344 DN Scrapie susceptibility-linked polymorphisms modulate the in vitro TΙ conversion of sheep \*\*\*prion\*\*\* protein to protease-resistant forms.

\*\*\*Bossers, Alex\*\*\*; Belt, Peter B. G. M.; Raymond, Gregory J.; ΑU Caughey, Byron; De Vries, Ruth; Smits, Mari A. [Reprint author] Dep. Bacteriol., DLO-Inst. Animal Sci. Health, P.O. Box b5, 8200 AB CS Lelystad, Netherlands Proceedings of the National Academy of Sciences of the United States of SO America, (1997) Vol. 94, No. 10, pp. 4931-4936. CODEN: PNASA6. ISSN: 0027-8424. DT Article English LA Entered STN: 24 Jun 1997 Last Updated on STN: 24 Jun 1997 \*\*\*Prion\*\*\* diseases are natural transmissible neurodegenerative disorders in humans and animals. They are characterized by the accumulation of a protease-resistant scrapie-associated \*\*\*prion\*\*\* protein (PrP-Sc) of the host-encoded cellular \*\*\*prion\*\*\* protein (PrP-C) mainly in the central nervous system. Polymorphisms in the PrP gene are linked to differences in susceptibility for \*\*\*prion\*\*\* diseases. The mechanisms underlying these effects are still unknown. Here we describe studies of the influence of sheep PrP polymorphisms on the conversion of PrP-C into protease-resistant forms. In a cell-free system, sheep PrP-Sc induced the conversion of sheep PrP-C into protease-resistant PrP (PrP-res) similar or identical to PrP-Sc. Polymorphisms present in either PrP-C or PrP-Sc had dramatic effects on the cell-free conversion efficiencies. The PrP variant associated with a

high susceptibility to scrapie and short survival times of

scrapie-affected sheep was efficiently converted into PrP-res. The wild-type PrP variant associated with a neutral effect on susceptibility

and intermediate survival times was converted with intermediate efficiency. The PrP variant associated with scrapie resistance and long survival times was poorly converted. Thus the in vitro conversion characteristics of the sheep PrP variants reflect their linkage with scrapie susceptibility and survival times of scrapie-affected sheep. The modulating effect of the polymorphisms in PrPc and PrPsc on the cell-free conversion characteristics suggests that, besides the species barrier, polymorphism barriers play a significant role in the transmissibility of \*\*\*prion\*\*\* diseases.

- L14 ANSWER 6 OF 9 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN 1997:422684 BIOSIS PREV199799721887 DN Molecular assessment of human susceptibility to BSE and scrapie. ΤI Raymond, Gregory [Reprint author]; Hope, James; Kocisko, David [Reprint ΑU author]; Priola, Suzette [Reprint author]; Raymond, Lynne [Reprint \*\*\*Bossers, Alex\*\*\* ; Lansbury, Peter; Caughey, Byron [Reprint author]; author] NIH/NIAID, Rocky Mountain Lab., Rocky Mountain, MN, USA CS FASEB Journal, (1997) Vol. 11, No. 9, pp. A1441. Meeting Info.: 17th International Congress of Biochemistry and Molecular
- Meeting Info.: 17th International Congress of Biochemistry and Molecular Biology in conjunction with the Annual Meeting of the American Society for Biochemistry and Molecular Biology. San Francisco, California, USA. August 24-29, 1997.

  CODEN: FAJOEC. ISSN: 0892-6638.

  DT Conference; (Meeting)
- Conference; Abstract; (Meeting Abstract)
  LA English
- ED Entered STN: 8 Oct 1997 Last Updated on STN: 8 Oct 1997
- L14 ANSWER 7 OF 9 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN DUPLICATE 5
- AN 1997:353905 BIOSIS
- DN PREV199799660308
- TI Molecular assessment of the potential transmissibilities of BSE and scrapie to humans.
- AU Raymond, Gregory J. [Reprint author]; Hope, James; Kocisko, David A. [Reprint author]; Priola, Suzette A. [Reprint author]; Raymond, Lynne D. [Reprint author]; \*\*\*Bossers, Alex\*\*\*; Ironside, James; Will, Robert G.; Chen, Shu G.; Petersen, Robert B.; Gambetti, Pierluigi; Rubenstein, Richard; Smits, Mari A.; Lansbury., Peter T., Jr.; Caughey, Bryon [Reprint author]
- CS Rocky Mountain Lab., NIAID, National Inst. Health, Hamilton, MT 59840, USA Nature (London), (1997) Vol. 388, No. 6639, pp. 285-288.

  CODEN: NATUAS. ISSN: 0028-0836.
- DT Article
- LA English
- ED Entered STN: 25 Aug 1997 Last Updated on STN: 25 Aug 1997
- More than a million cattle infected with bovine spongiform encephalopathy AB (BSE) may have entered the human food chain'. Fears that BSE might transmit to man were raised when atypical cases of Creutzfeldt-Jakob disease (CJD), a human transmissible spongiform encephalopathy (TSE), emerged in the UK. In BSE and other TSE diseases, the conversion of the protease-sensitive host \*\*\*prion\*\*\* protein (PrP-sen) to a protease-resistant isoform (PrP-res) is an important event in pathogenesis. Biological aspects of TSE diseases are reflected in the specificities of in vitro PrP conversion reactions. Here we show that there is a correlation between in vitro conversion efficiencies and known transmissibilities of BSE, sheep scrapie and CJD. On this basis, we used an in vitro system to gauge the potential transmissibility of scrapie and BSE to humans. We found limited conversion of human PrP-sen to PrP-res driven by PrP-res associated with both scrapie (PrP-Sc) and BSE (PrP-BSE). The efficiencies of these heterologous conversion reactions were similar but much lower than those of relevant homologous conversions. Thus the inherent ability of these infectious agents of BSE and scrapie to affect humans following equivalent exposure may be finite but similarly low.
- $_{\mbox{\scriptsize L14}}$  ANSWER 8 OF 9 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN DUPLICATE 6

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1996:526174 BIOSIS
DN
    PREV199699248530
    PrP genotype contributes to determining survival times of sheep with
     natural scrapie.
       ***Bossers, Alex*** ; Schreuder, Bram E. C.; Muileman, Ida H.; Belt,
     Peter B. G. M.; Smits, Mari A. [Reprint author]
    Dep. Bacteriol., DLO-Inst. Anim. Sci. Health, P.O. Box 65, 8200 AB
CS
     Lelvstad, Netherlands
    Journal of General Virology, (1996) Vol. 77, No. 10, pp. 2669-2673.
SO
    CODEN: JGVIAY. ISSN: 0022-1317.
DT
    Article
LΑ
    English
    Entered STN: 22 Nov 1996
ED
     Last Updated on STN: 22 Nov 1996
     Several allelic variants of the sheep PrP gene are associated with scrapie
     susceptibility. However, it is not known whether, and to what extent, the
     PrP genotype contributes to determining survival times of scrapie sheep.
     We therefore determined the PrP genotype and life spans of over 50 Flemish
     and Swifter sheep within a single scrapie-affected flock. Eighty-three
     per cent of the scrapie sheep were homozygous for the PrPvQ allele
     (polymorphic amino acids at codons 136 and 171 are indicated) and these
     sheep died from scrapie at a mean age of 25 months. In sheep heterozygous
     for PrP-VQ, development of scrapie was delayed or did not occur. Sheep
     with at least one PrP-AR allele, including PrP-VQ/PrP-AR sheep, did not
     develop scrapie. No scrapie sheep were found without a PrP-VQ allele. We
     conclude that the PrP genotype contributes to determining survival times
     of sheep with natural scrapie. Additionally, we describe two novel sheep
     PrP allelic variants.
L14 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2004 ACS on STN
     1997:593179 CAPLUS
AN
DN
     127:246402
     PrP allelic variants associated with natural scrapie
TΙ
    Belt, Peter B. G. M.; ***Bossers, Alex*** ; Schreuder, Bram E. C.;
     Smits, Mari A.
     Department of Bacteriology, Institute for Animal Science and Health
CS
     (ID-DLO), Lelystad, Neth.
     Bovine Spongiform Encephalopathy: The BSE Dilemma, [Proceedings of the
SO
     International Workshop on Bovine Spongiform Encephalopathy: The BSE
     Dilemma], 6th, Williamsburg, Va., Feb. 26-Mar. 1, 1995 (1996), 294-305.
     Editor(s): Gibbs, Clarence J. Publisher: Springer, New York, N. Y.
     CODEN: 64ZIAF
     Conference
DT
    English
LA
    The PrP allelic variants of 69 scrapie-affected and 176 healthy sheep by
     denaturing gradient gel electrophoresis (DGGE) were detd. The results
     indicated that specific combinations of polymorphisms within the PrP gene
     of sheep, rather that single polymorphisms, are assocd. with the incidence
     of scrapie. A pos. selection for the PrPARR allele and/or a neg.
     selection for the PrPVRQ in breeding programs could help to control
     natural scrapie.
=> s prion? and (guanidine thiocyanate)
           103 PRION? AND (GUANIDINE THIOCYANATE)
L15
=> dup rem 115
PROCESSING COMPLETED FOR L15
             47 DUP REM L15 (56 DUPLICATES REMOVED)
L16
=> d bib ab 1-
YOU HAVE REQUESTED DATA FROM 47 ANSWERS - CONTINUE? Y/(N):y
L16 ANSWER 1 OF 47 CAPLUS COPYRIGHT 2004 ACS on STN
     2004:40993 CAPLUS
AN
     Sample preparation and immunoassay for the automated detection of
TТ
                           ***prion***
                                         proteins (PrPres) on a solid surface
     proteinase resistant
     with immobilized plasminogen
     Morel, Nathalie; Creminon, Christophe; Grassi, Jacques
TN
     Commissariat A L'Energie Atomique, Fr.
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ΔN

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Fr. Demande, 40 pp.
SO
     CODEN: FRXXBL
DΤ
    Patent
    French
FAN.CNT 1
                                                                  DATE
                        KIND DATE
                                           APPLICATION NO.
     PATENT NO.
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                                           _____
                                                                  _____
                                         FR 2002-8608
                              20040116
                         A1
                                                                  20020709
    FR 2842303
     WO 2004008144
                         A2
                               20040122
                                           WO 2003-FR2117
                                                                  20030708
                               20040408
     WO 2004008144
                         A3
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
             PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,
             TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
             CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
             GW, ML, MR, NE, SN, TD, TG
PRAI FR 2002-8608
                        Α
                              20020709
AB The invention concerns an immunoassay for the automated detn. of
     proteinase resistant ***prion*** proteins (PrPres) on the surface of
     microtiterplates or magnetic spheres with immobilized plasminogen. The
     procedure includes: (a) sample prepn. (i) homogenization of the sample,
     e.q. sheep brain in a buffer contg. ionic and non-ionic surfactants,
     glucose, saccharose, phosphate and optionally proteinase K; (ii) treatment
     with a capture buffer that contains ionic surfactants and optionally
     proteinase K; (b) capturing the PrPres from the prepd. sample onto a
     surface with covalently immobilized plasminogen using the above buffer
     without proteinase K; (c) denaturation of PrPres on the plasminogen
     surface using a chaotropic agent at 100.degree.C; (d) detection of the
     denatured and immobilized PrPres using specific antibodies to protein PrP.
              THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT 4
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
L16 ANSWER 2 OF 47 USPATFULL on STN
       2004:166069 USPATFULL
AN
       Sodium dodecyl sulfate compositions for inactivating ***prions***
TI
       Prusiner, Stanley B., San Francisco, CA, UNITED STATES
TN
       Supattapone, Surachai, Hanover, NH, UNITED STATES
       US 2004127559 A1 20040701
PΤ
                         A1 20031212 (10)
ΑI
       US 2003-735454
       Continuation of Ser. No. US 2002-56222, filed on 22 Jan 2002, GRANTED,
RLI
       Pat. No. US 6720355 Continuation-in-part of Ser. No. US 2001-904178,
       filed on 11 Jul 2001, GRANTED, Pat. No. US 6719988 Continuation-in-part
       of Ser. No. US 2000-699284, filed on 26 Oct 2000, ABANDONED
       Continuation-in-part of Ser. No. US 2000-494814, filed on 31 Jan 2000,
       GRANTED, Pat. No. US 6322802 Continuation-in-part of Ser. No. US
       1999-447456, filed on 22 Nov 1999, GRANTED, Pat. No. US 6331296
       Continuation-in-part of Ser. No. US 1999-322903, filed on 1 Jun 1999,
       GRANTED, Pat. No. US 6214366 Continuation-in-part of Ser. No. US
       1999-235372, filed on 20 Jan 1999, GRANTED, Pat. No. US 6221614
       Continuation-in-part of Ser. No. US 1998-151057, filed on 10 Sep 1998,
       ABANDONED Continuation-in-part of Ser. No. US 1998-26957, filed on 20
       Feb 1998, ABANDONED Continuation-in-part of Ser. No. US 1997-804536,
       filed on 21 Feb 1997, GRANTED, Pat. No. US 5891641
       Utility
DT
FS
       APPLICATION
      BOZICEVIC, FIELD & FRANCIS LLP, 200 MIDDLEFIELD RD, SUITE 200, MENLO
LREP
       PARK, CA, 94025
CLMN
       Number of Claims: 41
       Exemplary Claim: 1
ECL
       12 Drawing Page(s)
LN.CNT 3476
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       An antiseptic composition useful in destroying the infectivity of
       infectious proteins such as ***prions*** is disclosed. The
       antiseptic composition is preferably maintained at either a low pH of
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4.0 or less or a high pH of 10.0 or more either of which allows for an

environment under which the active component (which is preferably sodium dodecyl sulfate) destroys infectivity. The composition may be added to blood, blood products, collagen, tissues and organs prior to transplantation. The composition also may be added to livestock feed to denature any \*\*\*prions\*\*\* in the livestock. Methods of denaturing infectious proteins are also disclosed which method can use but do not require higher temperatures and long period of exposure.

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L16 ANSWER 3 OF 47 USPATFULL on STN
       2004:166068 USPATFULL
AN
ΤI
       Sodium dodecyl sulfate compositions for inactivating
                                                               ***prions***
IN
       Prusiner, Stanley B., San Francisco, CA, UNITED STATES
       Supattapone, Surachai, Hanover, NH, UNITED STATES
PΑ
       The Regents of the University of California (U.S. corporation)
PΙ
       US 2004127558
                          A1
                               20040701
       US 2003-735140
ΑI
                          Al
                               20031212 (10)
RLI
       Continuation of Ser. No. US 2002-56222, filed on 22 Jan 2002, GRANTED,
       Pat. No. US 6720355 Continuation-in-part of Ser. No. US 2001-904178,
       filed on 11 Jul 2001, GRANTED, Pat. No. US 6719988 Continuation-in-part
       of Ser. No. US 2000-699284, filed on 26 Oct 2000, ABANDONED
       Continuation-in-part of Ser. No. US 2000-494814, filed on 31 Jan 2000,
       GRANTED, Pat. No. US 6322802 Continuation-in-part of Ser. No. US
       1999-447456, filed on 22 Nov 1999, GRANTED, Pat. No. US 6331296
       Continuation-in-part of Ser. No. US 1999-322903, filed on 1 Jun 1999,
       GRANTED, Pat. No. US 6214366 Continuation-in-part of Ser. No. US
       1999-235372, filed on 20 Jan 1999, GRANTED, Pat. No. US 6221614
       Continuation-in-part of Ser. No. US 1998-151057, filed on 10 Sep 1998,
       ABANDONED Continuation-in-part of Ser. No. US 1998-26957, filed on 20
       Feb 1998, ABANDONED Continuation-in-part of Ser. No. US 1997-804536,
       filed on 21 Feb 1997, GRANTED, Pat. No. US 5891641
ידת
       Utility
FS
       APPLICATION
LREP
       BOZICEVIC, FIELD & FRANCIS LLP, 200 MIDDLEFIELD RD, SUITE 200, MENLO
       PARK, CA, 94025
       Number of Claims: 38
CLMN
ECL
       Exemplary Claim: 1
DRWN
       12 Drawing Page(s)
LN.CNT 3467
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       An antiseptic composition useful in destroying the infectivity of
       infectious proteins such as ***prions*** is disclosed. The
       antiseptic composition is preferably maintained at either a low pH of
       4.0 or less or a high pH of 10.0 or more either of which allows for an
       environment under which the active component (which is preferably sodium
       dodecyl sulfate) destroys infectivity. The composition may be added to
       blood, blood products, collagen, tissues and organs prior to
       transplantation. The composition also may be added to livestock feed to
       denature any ***prions*** in the livestock. Methods of denaturing
       infectious proteins are also disclosed which method can use but do not
       require higher temperatures and long period of exposure.
L16 ANSWER 4 OF 47 USPATFULL on STN
       2004:158591 USPATFULL
AN
TT
       Method of preparing a standard diagnostic gene transcript pattern
ΙN
       Sharma, Praveen, Oslo, NORWAY
       Lonneborg, Anders, Aas, NORWAY
PΑ
       DIAGENIC AS (non-U.S. corporation)
ΡI
       US 2004121390
                        Al
                              20040624
AΤ
       US 2003-727576
                         A1
                               20031205 (10)
       Division of Ser. No. US 1999-429003, filed on 29 Oct 1999, GRANTED, Pat.
RLI
       No. US 6720138 Continuation of Ser. No. WO 1998-GB1261, filed on 30 Apr
       1998, UNKNOWN
       NO 1997-2006
PRAT
                           19970430
       Utility
DT
FS
       APPLICATION
       SUGHRUE MION, PLLC, 2100 Pennsylvania Avenue, N.W., Washington, DC,
LREP
       20037-3213
CLMN
       Number of Claims: 17
ECL
       Exemplary Claim: 1
       3 Drawing Page(s)
DRWN
LN.CNT 1269
```

CAS INDEXING IS AVAILABLE FOR THIS PATENT. A method for preparing a gene transcript pattern probe kit characteristic of a disease or condition or a stage thereof in a prokaryotic or eukaryotic organism using mRNA which is differentially expressed in the disease or condition or stage as probes, methods of diagnosis using the method and kits for performing the same are disclosed. L16 ANSWER 5 OF 47 USPATFULL on STN 2004:69606 USPATFULL AΝ ΤI Sodium dodecyl sulfate compositions for inactivating \*\*\*prions\*\*\* Prusiner, Stanley B., San Francisco, CA, UNITED STATES IN Supattapone, Surachai, Hanover, NH, UNITED STATES The Regents of the University of California (U.S. corporation) PΑ US 2004052833 A1 20040318 PΙ US 2003-641687 20030814 (10) ΑI A1 Continuation of Ser. No. US 2002-56222, filed on 22 Jan 2002, PENDING RLI Continuation-in-part of Ser. No. US 2001-904178, filed on 11 Jul 2001, PENDING Continuation-in-part of Ser. No. US 2000-699284, filed on 26 Oct 2000, PENDING Continuation-in-part of Ser. No. US 2000-494814, filed on 31 Jan 2000, GRANTED, Pat. No. US 6322802 Continuation-in-part of Ser. No. US 1999-447456, filed on 22 Nov 1999, GRANTED, Pat. No. US 6331296 Continuation-in-part of Ser. No. US 1999-322903, filed on 1 Jun 1999, GRANTED, Pat. No. US 6214366 Continuation-in-part of Ser. No. US 1999-235372, filed on 20 Jan 1999, GRANTED, Pat. No. US 6221614 Continuation-in-part of Ser. No. US 1998-151057, filed on 10 Sep 1998, ABANDONED Continuation-in-part of Ser. No. US 1998-26957, filed on 20 Feb 1998, ABANDONED Continuation-in-part of Ser. No. US 1997-804536, filed on 21 Feb 1997, GRANTED, Pat. No. US 5891641 DT Utility FS APPLICATION BOZICEVIC, FIELD & FRANCIS LLP, 200 MIDDLEFIELD RD, SUITE 200, MENLO LREP PARK, CA, 94025 CLMN Number of Claims: 38 ECL Exemplary Claim: 1 DRWN 12 Drawing Page(s) LN.CNT 3478 CAS INDEXING IS AVAILABLE FOR THIS PATENT. An antiseptic composition useful in destroying the infectivity of infectious proteins such as \*\*\*prions\*\*\* is disclosed. The antiseptic composition is preferably maintained at either a low pH of 4.0 or less or a high pH of 10.0 or more either of which allows for an

environment under which the active component (which is preferably sodium dodecyl sulfate) destroys infectivity. The composition may be added to blood, blood products, collagen, tissues and organs prior to transplantation. The composition also may be added to livestock feed to denature any \*\*\*prions\*\*\* in the livestock. Methods of denaturing infectious proteins are also disclosed which method can use but do not

L16 ANSWER 6 OF 47 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED. on STN

require higher temperatures and long period of exposure.

ΔN 2004196462 EMBASE

[Creutzfeldt-Jakob disease and other human transmissible spongiform encephalopathies. Part II]. CHOROBA CREUTZFELDTA-JAKOBA I INNE PASAZOWALNE ENCEFALOPATIE GABCZASTE CZIOWIEKA, CZESC II.

Zaborowski A.

A. Zaborowski, Klin. Psychiat. Wieku Podeszl./Z. P., I Klinika CS Psychiatryczna, Uniwersytetu Medycznego, ul. Czechoslowacka 8/10, 92-216 Lodz, Poland

Psychiatria Polska, (2004) 38/2 (297-309). SO Refs: 62

ISSN: 0033-2674 CODEN: PSPOB3

CY Poland

Journal: Article DT

General Pathology and Pathological Anatomy FS 005 008 Neurology and Neurosurgery

032 Psychiatry

LΑ Polish

English; Bulgarian; German; French

the Creutzfeldt-Jakob disease and basic informations about other human \*\*\*prion\*\*\* diseases. General problems of \*\*\*prion\*\*\* diseases and clinical symptoms of Creutzfeldt-Jakob disease were presented in the first part. \*\*\*Prion\*\*\* diseases are also known as transmissible cerebral amyloidoses (TCA) or transmissible (subacute) spongiform encephalopathies (TSE, SSE). There are following human TSE's: Creutzfeldt-Jakob disease (CJD) - the most frequent TSE, and its new variant (vCJD) - a result of BSE's transmission into human, sometimes treated as a aeparate disease; also: Gerstmann-Straussler-Scheinker syndrome (GSS) that may be a variant of familial CJD, kuru - probably a result of sporadic CJD's transmission by cannibalism, and fatal familial insomnia (FFI). Their clinical symptoms (and especially of the CJD), are nonspecific and sometimes variable. The imaging, EEG and other laboratory tests are not specific either. Neuropathological studies are needed but their interpretation may be equivocal. TSE's are characterised by the neurodegenerative process with characteristic spongiosis. However, vacuolisation - similar as in TSE-spongiosis - may occur in some CNS's disorders and in the case of putrescent brain tissue. In some cases of CJD, particularly those of long duration, the neuronal loss and astrocyte proliferation can mask the presence of spongiform changes, especially when vacuoles are not numerous. The only certain diagnostic marker for TSE is PrP(Sc), \*\*\*prion\*\*\* protein, presently believed to be a direct cause for all TSEs (TCAs). ThePrP(Sc) has a dominant .beta.-sheet amyloid structure which makes its detection by immunohistochemical procedure possible only with special pretreatment, e.c.: hydrolitic autoclaving, hydrated autoclaving, incubations: formic acid (or \*\*\*quanidine\*\*\* \*\*\*thiocyanate\*\*\* ) pretreatment, also combined pretreatments. These methods are standard diagnostic procedures for transmissible cerebral amyloidoses. L16 ANSWER 7 OF 47 CAPLUS COPYRIGHT 2004 ACS on STN AN 2003:349832 CAPLUS 138:365135 Immunoassay reagent and kit for measuring abnormal-type \*\*\*prion\*\*\* TΙ and immunoassay method for measuring abnormal-type \*\*\*prion\*\*\* reagent or kit. IN Shinagawa, Shinichi; Horiuchi, Motohiro; Yanagitani, Takayuki; Matsui, Toshio; Umetani, Atsushi PΑ Fujirebio, Inc., Japan Jpn. Kokai Tokkyo Koho, 9 pp. CODEN: JKXXAF DT Patent LA Japanese FAN.CNT 1 KIND DATE PATENT NO. APPLICATION NO. DATE -----\_\_\_\_ -----\_\_\_\_\_\_ -----A2 20030508 JP 2003130880 JP 2001-330696 20011029 PRAI JP 2001-330696 20011029 An immunoassay method is provided for detecting the abnormal-type \*\*\*prion\*\*\* with high sensitivity without performing a time-consuming electrophoresis operation or centrifugation operation. Also provided is an immunoassay reagent for this method, which is prepd. by immobilizing a first antibody immunol. reactive with the abnormal-type \*\*\*prion\*\*\* treated with a denaturing agent (e.g., guanidine, \*\*\*guanidine\*\*\* \*\*\*thiocyanate\*\*\* ) on magnetic particles. The method comprises a process for treating a sample potentially contg. the abnormal-type \*\*\*prion\*\*\* with a surfactant, collagenase and a proteinase (e.g., proteinase K), a process for treating the product obtained with a denaturing agent without having a centrifuge operation, and a process for immunol. assaying the product with the immunoassay reagent. L16 ANSWER 8 OF 47 USPATFULL on STN AN 2003:232025 USPATFULL ТΤ Ligands specific for an isoform of the \*\*\*prion\*\*\* protein IN James, William Siward, Oxford, UNITED KINGDOM Hope, James, Newbury, UNITED KINGDOM Tahiri-Alaoui, Abdessamad, Oxford, UNITED KINGDOM PΙ US 2003162225 A1 20030828 US 2002-295798 A1 20021115 (10) ΑI RLI Continuation of Ser. No. WO 2001-GB2228, filed on 18 May 2001, UNKNOWN PRAI GB 2000-12054 20000518

The second part of this work presents the neuropathological problems of

AΒ

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DT
      Utility
FS
       APPLICATION
      GRAY CARY WARE & FREIDENRICH LLP, 4365 EXECUTIVE DRIVE, SUITE 1100, SAN
LREP
       DIEGO, CA, 92121-2133
      Number of Claims: 10
CLMN
ECL
       Exemplary Claim: 1
     10 Drawing Page(s)
DRWN
LN.CNT 1030
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
         ***Prion***
                     protein, PrP, ligands are provided, especially protease
       resistant and nuclease resistant ligands. Ligands selective for isoforms
       such as PrP.sup.SC can be prepared. In a related aspect, the PrP ligands
       are used in diagnostic tests for PrP. The ligands also have potential
       for a role in the development of therapeutic methods for treatment of
       TSEs.
L16 ANSWER 9 OF 47 USPATFULL on STN
ΑN
       2003:194526 USPATFULL
      Muscle sample prepared for ***prion***
                                                assay
TТ
       Prusiner, Stanley B., San Francisco, CA, UNITED STATES
IN
      Bosque, Patrick, Denver, CO, UNITED STATES
                       Al 20030717
ΡI
      US 2003134337
                         A1 20020802 (10)
AΙ
      US 2002-211942
      US 2002-351525P
                          20020122 (60)
PRAI
      US 2001-323903P
                          20010920 (60)
DТ
      Utility
FS
      APPLICATION
LREP
      BOZICEVIC, FIELD & FRANCIS LLP, 200 MIDDLEFIELD RD, SUITE 200, MENLO
      PARK, CA, 94025
CLMN
      Number of Claims: 33
ECL
      Exemplary Claim: 1
DRWN
     9 Drawing Page(s)
LN.CNT 1977
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
      A method of preparing a sample of muscle tissue and of assaying the
      prepared sample to determine the presence of ***prions*** in the
      sample is disclosed. The muscle tissue is homogenized and mixed with a
      complexing agent which forms a complex with a higher specific gravity
      than PrP.sup.Sc, the complexing agent or other components of the
      homogenate. Gravity is then used (e.g. ultra centrifugation) to
      concentrate the complex and the concentrate is assayed to detect
         ***prions*** . The muscle tissue is preferably extracted from a muscle
      or group of muscles such as hind limb muscle which have a higher or more
      preferably the highest concentration of ***prions*** as compared to
      other muscle in the mammal.
L16 ANSWER 10 OF 47 USPATFULL on STN
      2003:173177 USPATFULL
AΝ
      Capture compounds, collections thereof and methods for analyzing the
ΤI
      proteome and complex compositions
      Koster, Hubert, La Jolla, CA, UNITED STATES
IN
      Siddiqi, Suhaib, Oceanside, CA, UNITED STATES
      Little, Daniel P., Winchester, MA, UNITED STATES
PΤ
      US 2003119021
                       A1 20030626
ΑI
      US 2002-197954
                         A1 20020716 (10)
PRAI
      US 2001-306019P
                         20010716 (60)
      US 2001-314123P
                          20010821 (60)
      US 2002-363433P
                          20020311 (60)
      Utility
DΤ
FS
      APPLICATION
      STEPHANIE SEIDMAN, HELLER EHRMAN WHITE & MCAULIFFE LLP, 7th FL., 4350 LA
LREP
      JOLLA VILLAGE DRIVE, SAN DIEGO, CA, 92122-1246
      Number of Claims: 125
CLMN
ECL
      Exemplary Claim: 1
      70 Drawing Page(s)
LN.CNT 6373
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
      Capture compounds and collections thereof and methods using the
      compounds for the analysis of biomolecules are provided. In particular,
      collections, compounds and methods are provided for analyzing complex
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protein mixtures, such as the proteome. The compounds are

multifunctional reagents that provide for the separation and isolation of complex protein mixtures. Automated systems for performing the methods also provided.

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L16 ANSWER 11 OF 47 USPATFULL on STN AN 2003:64747 USPATFULL
       Method for detecting
                             ***prion***
ΤI
                                           proteins in tissue samples
       Aslamkhan, Abubakr, Durham, NC, UNITED STATES
IN
       Higgins, Donald, Franklinton, NC, UNITED STATES
PΙ
       US 2003044868
                        A1 20030306
AΙ
       US 2001-924812
                         A1 20010808 (9)
DТ
       Utility
FS
       APPLICATION
LREP
      PARADIGM GENETICS, INC, 108 ALEXANDER DRIVE, P O BOX 14528, RTP, NC,
       27709-4528
CLMN
      Number of Claims: 13
ECL
       Exemplary Claim: 1
DRWN
       4 Drawing Page(s)
LN.CNT 778
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       Surprisingly, the present inventors have discovered that thermal
       denaturation of ***prion*** protein facilitates its detection by
       immunological methods. Accordingly, the present invention provides
       methods for the preparation and thermal denaturation of samples for
         ***prion*** detection, comprising: homogenizing a candidate sample and
       heating said sample in a buffer, preferably one with properties that aid
       stabilization of the denatured form of the protein. The methods
       described in this disclosure can be used in the detection of PrP.sup.Sc.
       Such detection is useful for the diagnosis of transmissible spongiform
       encephalopathies. This method can be used with immunoassays of various
       formats, including, but not limited to, dot blot and western blot
       assays, which utilize polyclonal antibodies, monoclonal antibodies,
       antibody fragments, receptors, natural and synthetic ligands and other
       entities.
L16 ANSWER 12 OF 47 USPATFULL on STN
       2003:30296 USPATFULL
AN
ΤI
       Protein aggregation assays and uses thereof
      Kondejewski, Les, St. Lazare, CANADA
IN
       Chakrabartty, Avijit, Vaughan, CANADA
       Qi, Xiao-Fei, Toronto, CANADA
       Cashman, Neil, Toronto, CANADA
      US 2003022243
                       A1 20030130
AΤ
      US 2002-176809
                         A1 20020620 (10)
PRAI
      US 2001-299849P
                         20010620 (60)
יית
      Utility
FS
      APPLICATION
LREP
      CLARK & ELBING LLP, 101 FEDERAL STREET, BOSTON, MA, 02110
CLMN
      Number of Claims: 115
ECL
      Exemplary Claim: 1
DRWN
      23 Drawing Page(s)
LN.CNT 2602
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       This invention features methods for identifying agents that modulate
       protein aggregation or stabilize protein conformation. Exemplary methods
       include an in vitro aggregation assay, a native state stabilization
       assay, a cell-based screening assay, and an animal-based screening
       assay. These methods can be used to identify agents useful for the
       treatment of conformational diseases resulting from aggregation of a
      protein.
L16 ANSWER 13 OF 47 USPATFULL on STN
      2003:17028 USPATFULL
ТT
       Polymer conjugates of proteinases
IN
       Sherman, Merry R., San Carlos, CA, UNITED STATES
      Martinez, Alexa L., San Jose, CA, UNITED STATES
      Bhaskaran, Shyam S., San Bruno, CA, UNITED STATES
      Williams, L. David, Fremont, CA, UNITED STATES
       Saifer, Mark G., San Carlos, CA, UNITED STATES
       French, John A., Santa Cruz, CA, UNITED STATES
PΙ
      US 2003012777
                        A1 20030116
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ΑI
                        A1
                             20020628 (10)
       Continuation-in-part of Ser. No. US 2002-103128, filed on 22 Mar 2002,
RLI
       PENDING Continuation-in-part of Ser. No. US 2001-894071, filed on 28 Jun
       2001, ABANDONED
DT
       Utility
FS
       APPLICATION
       STERNE, KESSLER, GOLDSTEIN & FOX PLLC, 1100 NEW YORK AVENUE, N.W., SUITE
LREP
       600, WASHINGTON, DC, 20005-3934
CLMN
       Number of Claims: 143
ECL
       Exemplary Claim: 1
DRWN
       18 Drawing Page(s)
LN.CNT 2195
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       Methods are provided for the stabilization of proteinases by the
       covalent attachment of or admixture with water-soluble polymers. The
       resultant stabilized proteinases have increased stability under the
       harsh conditions used in industrial genomics, which permits their use in
       the extraction and isolation of nucleic acids and the identification of
       disease-related ***prion*** proteins at elevated temperatures in
       solutions containing chaotropic agents, such as sodium dodecyl sulfate,
       urea or guanidinium salts, conferring advantages for robotic
       applications.
L16 ANSWER 14 OF 47 USPATFULL on STN
       2003:4268 USPATFULL
AN
       Sodium dodecyl sulfate compositions for inactivating ***prions***
ΤI
TN
       Prusiner, Stanley B., San Francisco, CA, UNITED STATES
       Supattapone, Surachai, Hanover, NH, UNITED STATES
PΙ
       US 2003004312
                         A1 20030102
       US 6720355
                          B2
                               20040413
       US 2002-56222
                               20020122 (10)
ΑI
                         A1
       Continuation-in-part of Ser. No. US 2001-904178, filed on 11 Jul 2001,
RLI
       PENDING Continuation-in-part of Ser. No. US 2000-699284, filed on 26 Oct
       2000, PENDING Continuation-in-part of Ser. No. US 2000-494814, filed on
       31 Jan 2000, GRANTED, Pat. No. US 6322802 Continuation-in-part of Ser.
       No. US 1999-447456, filed on 22 Nov 1999, GRANTED, Pat. No. US 6331296
       Continuation-in-part of Ser. No. US 1999-322903, filed on 1 Jun 1999,
       GRANTED, Pat. No. US 6214366 Continuation-in-part of Ser. No. US
       1999-235372, filed on 20 Jan 1999, GRANTED, Pat. No. US 6221614
       Continuation-in-part of Ser. No. US 1998-151057, filed on 10 Sep 1998,
       ABANDONED Continuation-in-part of Ser. No. US 1998-26957, filed on 20
       Feb 1998, ABANDONED Continuation-in-part of Ser. No. US 1997-804536,
       filed on 21 Feb 1997, GRANTED, Pat. No. US 5891641
DT
       Utility
       APPLICATION
FS
       BOZICEVIC, FIELD & FRANCIS LLP, 200 MIDDLEFIELD RD, SUITE 200, MENLO
LREP
       PARK, CA, 94025
CLMN
      Number of Claims: 38
ECL
       Exemplary Claim: 1
DRWN
      12 Drawing Page(s)
LN.CNT 3471
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       An antiseptic composition useful in destroying the infectivity of
       infectious proteins such as ***prions***
                                                  is disclosed. The
       antiseptic composition is preferably maintained at either a low pH of
       4.0\ \mbox{or less} or a high pH of 10.0 or more either of which allows for an
       environment under which the active component (which is preferably sodium
       dodecyl sulfate) destroys infectivity. The composition may be added to
       blood, blood products, collagen, tissues and organs prior to
       transplantation. The composition also may be added to livestock feed to
                     ***prions***
                                    in the livestock. Methods of denaturing
       denature any
       infectious proteins are also disclosed which method can use but do not
       require higher temperatures and long period of exposure.
L16 ANSWER 15 OF 47 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on
     STN
                                                        DUPLICATE 2
ΑN
     2004:94985 BIOSIS
DN
     PREV200400095412
    In vitro evaluation of the anti- ***prionic***
                                                      activity of newly
     synthesized congo red derivatives.
```

Poli, Giorgio [Reprint Author]; Ponti, Wilma; Carcassola, Gabriella;

Ceciliani, Fabrizio; Colombo, Laura; Dall'Ara, Paola; Gervasoni, Marco; Giannino, Maria Laura; Martino, Piera Anna; Pollera, Claudia; Villa, Stefania; Salmona, Mario

Dipartimento di Patologia Animale, Igiene e Sanita Pubblica Veterinaria, Sezione di Microbiologia e Immunologia, Via Celoria 10, 20133, Milano, Italy

giorgio.poli@unimi.it

- Arzneimittel-Forschung, (2003) Vol. 53, No. 12, pp. 875-888. print. ISSN: 0004-4172 (ISSN print).
- DΤ Article
- English LΑ
- ED Entered STN: 11 Feb 2004
- Last Updated on STN: 11 Feb 2004 "Transmissible Spongiform Encephalopathies" (TSE) are a group of degenerative progressive fatal disorders of the CNS, affecting both humans and animals. The main pathogenic event is the conversion of cellular \*\*\*prion\*\*\* protein from the normal, enzyme-sensitive (PrPsen), to the insoluble proteinase K-resistant isoform (PrPres). Since the new juvenile variant of Creutzfeldt-Jakob disease (vCJD) is probably due to the transmission of Bovine Spongiform Encephalopathy (BSE) \*\*\*prion\*\*\* protein to man, therapeutic and preventive compounds for animals and humans are urgently needed. Congo Red (benzidine-diazo-bis-1naphthylamine-4-sulfonic acid sodium salt, CAS 573-58-0, CR), an azoic dye that inhibits amyloid deposition, and some newly synthesized derivatives, more lipophilic and less toxic, were tested for their anti- \*\*\*prionic\*\*\* activity, in different experimental models. Cell-free experiments using the synthetic peptide PrP 106-126, homologous to amino acid residues 106-126 of the human PrP, were run to determine the antiamyloidogenic properties of some of the molecules. Peptide solutions containing each compound were incubated at 37degreeC, for increasing times, to analyse the kinetics of aggregation of PrP 106-126 peptide. After incubation, the amount of non-aggregated peptide was measured by RP-HPLC. While CR enhanced the amyloidogenicity of PrP 106-126, derivatives "la" and "lb" both showed the opposite behaviour, reducing aggregation by 15-20%. In other experiments using electron microscopy PrP 106-126 was assayed with the same molecules to assess the number and size of fibrils formed. CR showed its typical interaction, producing amyloid aggregates; "la" did not interfere with fibril formation, while "lb" seemed to partially affect the structure of PrP 106-126 fibrils. Using a different cell-free model, it was investigated whether CR derivatives could reverse the protease-resistant PrPres, extracted from Syrian hamster infected brain, into the normal protease sensitive PrPsen. Samples containing fixed amounts of PrPres were incubated at 37degreeC for 1 h with all the newly synthesized molecules, at concentrations ranging from 50 mug/mL to 750 mug/mL. After treatment with proteinase K, half of each sample was incubated with 3 mol/L \*\*\*guanidine\*\*\* \*\*\*thiocyanate\*\*\* in order to exclude over-stabilisation of the PrPres aggregates already observed with CR. The remaining amount of PrPres was assessed by Enhanced Chemoluminescence (ECL) Western blotting analysis. None of the compounds induced the reversion of PrPres to PrPsen; nevertheless, 6 of the 8 molecules interacted with PrPres molecules, over-stabilising the PrPres aggregates, from this aspect being similar to CR in activity. Finally, the inhibition of the generation of PrPres in the S12 clone of a mouse neuroblastoma cell line (N2a S12), persistently infected by the mouse  $% \left( 1\right) =\left( 1\right) \left( 1$ adapted Chandler strain of scrapie, was evaluated. Increasing amounts of CR, "la" and "lb" were added to the culture medium at each cell passage. After various days of treatment, the cells were collected, lysed, and the amount of PrPres was assayed by ECL Western blotting after PK treatment. As expected, there was a decrease in pathological PrP expression starting from the 4th day of treatment, with 5 and 10 mug/mL CR; PrPres completely disappeared after respectively 10 and 14 days of treatment. "1a" was strongly effective after 3 days of treatment at 5 and 10 mug/mL, but it was also highly toxic; at the concentration of 1 mug/mL, it had a mild inhibitory effect after 8 days. The reduction of PrPres was also evaluated by intracytoplasmic flow-cytometry immunofluorescence on CR- and "la"-treated N2a S12 cells. CR induced a dose-related decrease of PrP expression from day 3 to 13 of treatment. At the concentrations of 2 and 1.5 mug/mL "la" also strongly affected the expression of PrP starting from the 3rd day of treatment until the end of the experiment (day 13). These

results confirm the importance of using an integrated system, based on different experimental models, to obtain useful information on the

mechanism of action of anti- \*\*\*prionic\*\*\* compounds.

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L16 ANSWER 16 OF 47 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED.
     on STN
ΑN
    2003247281 EMBASE
      ***Prions*** and orthopedic surgery.
TT
    Doerr H.W.; Cinatl J.; Sturmer M.; Rabenau H.F.
ΑU
    H.W. Doerr, Institute for Medical Virology, Johann Wolfgang Goethe
CS
    University, Paul-Ehrlich-Str. 40, D-60596 Frankfurt/Main, Germany.
    H.W.Doerr@em.uni-frankfurt.de
    Infection, (2003) 31/3 (163-171).
SO
    Refs: 39
     ISSN: 0300-8126 CODEN: IFTNAL
CY
    Germany
    Journal; General Review
DТ
             Microbiology
    005
             General Pathology and Pathological Anatomy
     033
             Orthopedic Surgery
LΑ
    English
SL
    English
      ***Prions*** are a novel class of infectious agents that cause
     subacute encephalopathy in man and animals as human Creutzfeldt-Jakob
     disease (CJD), sheep scrapie and bovine spongiforrn encephalopathy (BSE).
     Previously, ***prions*** were shown to be transmitted by neuro- and
     ophthalmosurgical measures and by application of brain-derived therapeutic
     hormones. Recently, ***prions*** have been detected in blood specimens
     of experimentally infected monkeys indicating a principal threat to
     transfusion medicine, furthermore in human or bovine materials used in
     reconstitutive surgery. In this article the risk of ***prion***
     transmission from the surgeon to the patient or vice versa during
     (orthopedic) surgery is reevaluated including the issues of blood
     transfusion. This is accomplished based on recent epidemiologic findings
     and biometric calculations on the spread of ***prions*** in animals
     and humans as well as in terms of experimental data on artificially
     contaminated medical materials and devices. The overall risk of
       ***prion*** transmission in orthopedic surgery is considered very low if
     adequately prepared and sterilized materials and devices are used.
L16 ANSWER 17 OF 47 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on
                                                        DUPLICATE 3
AN
     2003:374228 BIOSIS
     PREV200300374228
DN
                                                ***prion*** protein
     Immunohistochemical investigations of the
     accumulation in human spongiform encephalopathies. Special report II.
     Zaborowski, Adam; Kordek, Radzislaw; Botts, Gerald T.; Liberski, Pawel P.
AU
     [Reprint Author]
     Department of Molecular Pathology and Neuropathology, Chair of Oncology,
CS
     Medical University, Czechoslowacka 8/10, 92-216, Lodz, Poland
     ppliber@csk.am.lodz.pl
SO
     Polish Journal of Pathology, (2003) Vol. 54, No. 1, pp. 39-47. print.
     ISSN: 1233-9687.
DΤ
     Article
     English
T.A
ED
     Entered STN: 13 Aug 2003
     Last Updated on STN: 13 Aug 2003
     Creutzfeldt-Jakob disease (CJD) in a proportion of cases may have
AB
     nonspecific clinical signs and symptoms and no characteristic neuroimaging
     and EEG picture. Thus, neuropathological studies are mandatory for a
     diagnosis. However, spongiform change, neuronal loss and astrocyte
     proliferation - the hallmarks of ***prion*** diseases, may also be
     absent or variable. In such cases, the diagnosis should be supported by
     the detection of ***prion*** protein (PrP) by Western blotting or
     immunohistochemistry (ICC). PrP may not be visualised under "regular"
     conditions, but it is unmasked following pretreatment procedures:
     incubation in formic acid or ***guanidine***
                                                       ***thiocyanate***
     microwave treatment, and hydrated or hydrolytic autoclaving, and these
     methods were included in standard diagnostic procedures in several different protocols. The aim of this study was to compare the
     effectiveness of these pretreatment methods and to introduce an optimal
     protocol for our laboratory. For this purpose, we used brain sections of
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11 cases of CJD, 1 case of Gerstmann-Straussler-Scheinker syndrome (GSS),

1 case of kuru and 3 control brains. For pretreatment we used the hydrated and hydrolytic autoclaving and incubation with formic acid. Immunostaining was performed with monoclonal 3F4 antibody against PrP. The best results were achieved with hydrolytic autoclaving. By this procedure we were able to detect the "synaptic" type of PrP accumulation in all CJD cases, as well as in GSS and kuru, while with other two methods the signal was weaker or even absent.

```
L16 ANSWER 18 OF 47 USPATFULL on STN
       2002:258862 USPATFULL
       Human endosulfine gene
ΤI
       Roch, Jean-Marc, Waukegan, IL, UNITED STATES
IN
       Scott, Victoria E.S., Evanston, IL, UNITED STATES
       Anderson, Kristi L., Grayslake, IL, UNITED STATES
       Sullivan, James P., Deerfield, IL, UNITED STATES
ΡI
       US 2002142432
                        A1 20021003
ΑI
       US 2001-824178
                         A1
                              20010402 (9)
       Continuation of Ser. No. US 1997-779775, filed on 7 Jan 1997, ABANDONED
PT.T
DT
       APPLICATION
FS
       Steven F. Weinstock, Abbott Laboratories, Department 377 / AP6D-2, 100
LREP
       Abbott Park Road, Abbott Park, IL, 60064-6050
CLMN
       Number of Claims: 40
ECI.
       Exemplary Claim: 1
DRWN
      8 Drawing Page(s)
LN.CNT 2951
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The present invention provides an isolated or purified polynucleotide
       that encodes human endosulfine polypeptide. Isoforms of human
       endosulfine are also disclosed. The invention also provides methods of
       making recombinant human endosulfine using the polynucleotides and host
       cells transformed with the polynucleotides.
L16 ANSWER 19 OF 47 USPATFULL on STN
       2002:78206 USPATFULL
ΑN
       Antiseptic compositions for inactivating ***prions***
тT
       Prusiner, Stanley B., San Francisco, CA, UNITED STATES
IN
       Supattapone, Surachai, Hanover, NH, UNITED STATES
       US 2002041859
                         A1
                               20020411
ΡI
       US 6719988
                         B2
                              20040413
       US 2001-904178
                         A1
                               20010711 (9)
ΑI
       Continuation-in-part of Ser. No. US 2000-699284, filed on 26 Oct 2000,
RLI
       PENDING Continuation-in-part of Ser. No. US 2000-494814, filed on 31 Jan
       2000, GRANTED, Pat. No. US 6322802 Continuation-in-part of Ser. No. US
       1999-447456, filed on 22 Nov 1999, PENDING Continuation-in-part of Ser.
       No. US 1999-322903, filed on 1 Jun 1999, GRANTED, Pat. No. US 6214366
       Continuation-in-part of Ser. No. US 1999-235372, filed on 20 Jan 1999,
       GRANTED, Pat. No. US 6221614 Continuation-in-part of Ser. No. US
       1998-151057, filed on 10 Sep 1998, ABANDONED Continuation-in-part of
       Ser. No. US 1998-26957, filed on 20 Feb 1998, ABANDONED
       Continuation-in-part of Ser. No. US 1997-804536, filed on 21 Feb 1997,
       GRANTED, Pat. No. US 5891641
DT
       Utility
      APPLICATION
FS
       Karl Bozicevic, Bozicevic, Field and Francis LLP, Suite 200, 200
       Middlefield Road, Menlo Park, CA, 94025
CLMN
      Number of Claims: 22
       Exemplary Claim: 1
ECL
DRWN
       12 Drawing Page(s)
LN.CNT 3354
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       An antiseptic composition useful in destroying the infectivity of
       infectious proteins such as ***prions***
                                                   is disclosed. The
       antiseptic composition is preferably maintained at a pH of 4.0 or less
       which allows for an environment under which the active component
       destroys infectivity. The composition may be added to blood, blood
       products, collagen, tissues and organs prior to transplantation. The
       composition also may be added to livestock feed to denature any
         ***prions*** in the livestock. Methods of denaturing infectious
       proteins are also disclosed.
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L16 ANSWER 20 OF 47 USPATFULL on STN
       2002:37505 USPATFULL
ΔN
ΤI
      METHOD OF PREPARING A STANDARD DIAGNOSTIC GENE TRANSCRIPT PATTERN
      SHARMA, PRAVEEN, OSLO, NORWAY
IN
       LONNEBORG, ANDERS, AAS, NORWAY
      US 2002022222 A1 20020221
PΤ
       US 6720138
                         B2
                              20040413
      US 1999-429003
                        A1 19991029 (9)
AΤ
       Continuation of Ser. No. WO 1998-GB1261, filed on 30 Apr 1998, UNKNOWN
RLI
PRAI
      NO 1997-2006
                        19970430
DТ
      Utility
      APPLICATION
FS
      SUGHRUE MION ZINN MACPEAK & SEAS PLLC, 2100 PENNSYLVANIA AVENUE NW,
LREP
       WASHINGTON, DC, 200373213
CLMN
      Number of Claims: 17
      Exemplary Claim: 1
ECL
DRWN
      3 Drawing Page(s)
LN.CNT 1238
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       A method for preparing a gene transcript pattern probe kit
       characteristic of a disease or condition or a stage thereof in a
       prokaryotic or eukaryotic organism using mRNA which is differentially
       expressed in the disease or condition or stage as probes, methods of
       diagnosis using the method and kits for performing the same are
       disclosed.
L16 ANSWER 21 OF 47 USPATFULL on STN
       2002:246898 USPATFULL
AN
       Transgenic mice expressing human APP and TGF-.beta. demonstrate
TΙ
       cerebrovascular amyloid deposits
       Mucke, Lennart, Foster City, CA, United States
TN
       Wyss-Coray, Tony, Berkeley, CA, United States
       Masliah, Eliezer, Chula Vista, CA, United States
       The Regents of the University of California, Oakland, CA, United States
PA
       (U.S. corporation)
       US 6455757
                        B1
                              20020924
      US 1999-262519
                              19990304 (9)
ΑI
       Continuation-in-part of Ser. No. US 1997-947295, filed on 8 Oct 1997
RLI
DT
       Utility
FS
      GRANTED
EXNAM Primary Examiner: Crouch, Deborah
      Francis, Carol L., Borden, Paula A., Bozicevic, Field & Francis, LLP
LREP
CLMN
      Number of Claims: 14
      Exemplary Claim: 1
ECL
DRWN
      9 Drawing Figure(s); 6 Drawing Page(s)
LN.CNT 1966
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The present invention features non-human transgenic animal models for
       Alzheimer's disease (AD) and CAA, wherein the transgenic animal is
       characterized by 1) expression of bioactive transforming growth
       factor-.beta.1 (TGF-.beta.1) or 2) both expression of bioactive
       TGF-.beta.1 and expression of a human amyloid .beta. precursor protein
       (APP) gene product. The transgenic animals may be either homozygous or
       heterozygous for these alterations. Bigenic animals are further
       characterized by development of AD-associated and/or CAA-associated
       pathology within about two to three months of age, and at about twelve
       months of age are characterized by a reduced number of neuritic plaques
       relative to singly transgenic animals. The invention also features
       methods of screening for biologically active agents that facilitate
       reduction of .beta.-amyloid deposits in vivo and methods for
       facilitating reduction of formation of neuritic plaques in a subject
       susceptible to AD.
L16 ANSWER 22 OF 47 USPATFULL on STN
       2002:152685 USPATFULL
AΝ
       Compositions and methods for advanced glycosylation endproduct-mediated
ΤI
       modulation of amyloidosis
       Vitek, Michael P., 205 Park Knoll La., Apex, NC, United States 27502
       Cerami, Anthony, Ram Island Dr., Shelter Island, NY, United States
       Bucala, Richard J., 504 E. 63rd St. Apt. 33-0, New York, NY, United
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States 10021 Ulrich, Peter C., 148 DeWolf Rd., Old Tappan, NJ, United States 07675 Vlassara, Helen, Ram Island Dr., Shelter Island, NY, United States Zhang, Xini, 150 Fairhaven Dr. Apt. D1, Jericho, NY, United States 117534) 20020625 ΡI US 6410598 B1 US 1995-477364 19950607 (8) AΙ Continuation-in-part of Ser. No. US 1995-457169, filed on 1 Jun 1995 Continuation-in-part of Ser. No. WO 1995-US1380, filed on 2 Feb 1995 RLI Continuation-in-part of Ser. No. US 1994-311768, filed on 23 Sep 1994, now abandoned Continuation of Ser. No. US 1994-191579, filed on 3 Feb 1994, now abandoned DTUtility FS GRANTED EXNAM Primary Examiner: Duffy, Patricia A. CLMN Number of Claims: 5 Exemplary Claim: 1 ECT. DRWN 12 Drawing Figure(s); 8 Drawing Page(s) LN.CNT 2202 CAS INDEXING IS AVAILABLE FOR THIS PATENT. The present invention relates generally to the non-enzymatic glycosylation of amyloidogenic proteins and the consequent formation of advanced glycosylation endproducts (AGEs). It has been found that formation of AGE-amyloidogenic proteins can enhance amyloidosis. The invention further relates to compositions and methods for the prevention and treatment of amyloidosis associated with amyloid diseases, particularly neurodegenerative disease and Type II diabetes, and more particularly Alzheimer's disease. In a specific example, aggregation of an amyloidogenic peptide, .beta.AP, is enhanced by the glycosylation reaction of .beta.AP to form AGE-.beta.AP as defined herein. Accordingly, the invention extends to a method for modulating the in vivo aggregation of amyloid polypeptides and associated amyloidosis by controlling the formation and presence of AGE-amyloid polypeptide. A corresponding diagnostic utility comprises the measurement of the course and extent of amyloidosis by a measurement of the presence and amount of AGEs and particularly, AGE-amyloid. An assay is included that may use the AGE-amyloid polypeptide of the present invention to identify disease states characterized by the presence of AGE-amyloid. Additionally, such an assay can be utilized to monitor therapy and thus adjust a dosage regimen for a given disease state characterized by the presence of AGE-amyloid. L16 ANSWER 23 OF 47 MEDLINE on STN MEDLINE 2002621819 AN PubMed ID: 12379130 DN \*\*\*prion\*\*\* protein in aggregates of Protease-sensitive scrapie TΙ heterogeneous sizes. Tzaban Salit; Friedlander Gilgi; Schonberger Oshrat; Horonchik Lior; AII Yedidia Yifat; Shaked Gideon; Gabizon Ruth; Taraboulos Albert Department of Molecular Biology, The Hebrew University-Hadassah Medical CS School, and Hadassah University Hospital, Jerusalem 91120, Israel. Biochemistry, (2002 Oct 22) 41 (42) 12868-75. SO Journal code: 0370623. ISSN: 0006-2960. United States Journal; Article; (JOURNAL ARTICLE) DT LΑ English Priority Journals FS 200212 Entered STN: 20021017 ED Last Updated on STN: 20021217 Entered Medline: 20021211 \*\*\*prion\*\*\* protein PrP(Sc) is the only known The pathological AB component of the infectious \*\*\*prion\*\*\* . In cells infected with \*\*\*prions\*\*\* , PrP(Sc) is formed posttranslationally by the refolding of the benign cell surface glycoprotein PrP(C) into an aberrant conformation. The two PrP isoforms possess very different properties, as PrP(Sc) has a protease-resistant core, forms very large amyloidic aggregates in detergents, and is only weakly immunoreactive in its native form. We now show that \*\*\*prion\*\*\* -infected rodent brains and cultured cells contain previously unrecognized protease-sensitive PrP(Sc) varieties. In

both ionic (Sarkosyl) and nonionic (n-octyl beta-D-glucopyranoside) detergents, the novel protease-sensitive PrP(Sc) species formed aggregates as small as 600 kDa, as measured by gel filtration. The denaturation dependence of PrP(Sc) immunoreactivity correlated with the size of the aggregate. The small PrP(Sc) aggregates described here are consistent with the previous demonstration of scrapie infectivity in brain fractions with a sedimentation coefficient as small as 40 S [Prusiner et al. (1980) J. Neurochem. 35, 574-582]. Our results demonstrate for the first time that \*\*\*prion\*\*\* -infected tissues contain protease-sensitive PrP(Sc) molecules that form low MW aggregates. Whether these new PrP(Sc) species play a role in the biogenesis or the pathogenesis of \*\*\*prion\*\*\* remains to be established.

```
L16 ANSWER 24 OF 47 USPATFULL on STN
       2001:90277 USPATFULL
AN
       METHODS FOR IN VITRO SUSCEPTIBILITY TESTING OF CHLAMYDIA
ΤI
       STRATTON, CHARLES W, NASHVILLE, TN, United States
IN
       MITCHELL, WILLIAM M, NASHVILLE, TN, United States
РΤ
       US 2001002421
                        A1 20010531
                         B2
A1
                               20010710
       US 6258532
       US 1998-25176
                              19980218 (9)
AΙ
       Continuation-in-part of Ser. No. US 1997-911593, filed on 14 Aug 1997,
RIT
       ABANDONED
DT
       Utility
FS
       APPLICATION
      KAREN F. ELBING, CLARK AND ELBING, 176 FEDERAL STREET, BOSTON, MA, 02110
LREP
CLMN Number of Claims: 55
ECL
       Exemplary Claim: 1
DRWN
     No Drawings
LN.CNT 763
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       Methods for determining the susceptibility of intracellular pathogens,
       particularly Chlamydia, to single or combination of test agents are
       described. The methods can be used for in vitro or in vivo evaluation of
       agents that can be used as therapeutic agents in the
       treatment/eradication of pathogen infection in general or to target a
       specific infected organ. Assays which utilize nucleic amplification
       techniques (e.g., PCR) to determine effectiveness of the agent(s)
       evaluated are also described.
L16 ANSWER 25 OF 47 USPATFULL on STN
       2001:8223 USPATFULL
AN
       Transgenic mouse model of alzheimer's disease and cerebral amyloid
ΤI
       angiopathy
       Mucke, Lennart, Foster City, CA, United States
IN
       Wyss-Coray, Tony, Berkeley, CA, United States
       Masliah, Eliezer, Chula Vista, CA, United States
       The Regents of the University of California, Oakland, CA, United States
PΑ
       (U.S. corporation)
PΙ
       US 6175057
                        B1
                               20010116
       US 1997-947295
                               19971008 (8)
ΑI
DT
       Utility
       Granted
FS
EXNAM Primary Examiner: Crouch, Deborah
LREP Francis, Carol L., Borden, Paula A.Bozicevic, Field & Francis LLP
       Number of Claims: 23
CLMN
       Exemplary Claim: 1
ECL
      6 Drawing Figure(s); 5 Drawing Page(s)
DRWN
LN.CNT 1697
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The present invention features non-human transgenic animal models for
       Alzheimer's disease (AD) and CAA, wherein the transgenic animal is
       characterized by 1) overexpression of bioactive transforming growth
       factor-.beta.1 (TGF-.beta.1) or 2) both overexpression of bioactive
       TGF-.beta.1 and expression of a human amyloid .beta. precursor protein
       (APP) gene product. The transgenic animals may be either homozygous or
       heterozygous for these alterations. Bigenic animals are further
       characterized by development of AD-associated and/or CAA-associated
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pathology within about two to three months of age.

```
2000:574024 CAPLUS
ΔN
DΝ
    133:174276
ΤI
       ***Prion***
                    test using ***guanidine***
                                                       ***thiocyanate***
                                                                            for
     reducing false positive test results
     Garssen, Gerrit Jan; Jacobs, Jorg Gunther; Langeveld, Joannes Pieter
     Maria; Smits, Marinus Adrianus; Van Keulen, Lucien Johannes Mattheus;
     Schreuder, Bram Edward Cornelis; Bossers, Alexander
     Stichting Dienst Landbouwkundig Onderzoek, Neth.
PA
    PCT Int. Appl., 49 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LΑ
    English
FAN.CNT 1
                         KIND DATE
                                            APPLICATION NO.
                                                                    DATE
     PATENT NO.
                                            _____
                                _____
                         ----
     WO 2000048003
                         Al
                                20000817
                                           WO 2000-NL79
                                                                   20000209
         W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
             CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
             IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
             MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
             DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
             CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                         A1 20011107 EP 2000-904139
     EP 1151305
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
PRAI EP 1999-200391
                         A
                                19990211
     WO 2000-NL79
                          W
                                20000209
    The invention is related to diagnostic methods for detecting transmissible
     spongiform encephalopathies (TSEs) such as BSE and scrapie and related
     disease in humans. The invention provides use of ***guanidine***

***thiocyanate*** (gdnSCN) or a functional equiv. thereof for treating
     at least one sample derived from a mammal, including humans for reducing
     the risk of scoring a false-pos. test result in testing said sample for
     the presence or absence of aberrant ***prion*** protein.
              THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
L16 ANSWER 27 OF 47 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on
                                                         DUPLICATE 4
     2000:117032 BIOSIS
     PREV200000117032
DN
TΙ
     Creutzfeldt-Jakob disease: Carnoy's fixative improves the
     immunohistochemistry of the proteinase K-resistant ***prion***
ΑIJ
     Giaccone, Giorgio [Reprint author]; Canciani, Barbara; Puoti, Gianfranco;
     Rossi, Giacomina; Goffredo, Donato; Lussich, Selina; Fociani, Paolo;
     Tagliavini, Fabrizio; Bugiani, Orso
     Istituto Neurologico Carlo Besta, via Celoria 11, 20133, Milano, Ml, Italy
CS
     Brain Pathology, (Jan., 2000) Vol. 10, No. 1, pp. 31-37. print.
     ISSN: 1015-6305.
DT
     Article
    English
LΑ
ED
     Entered STN: 29 Mar 2000
     Last Updated on STN: 3 Jan 2002
     The neuropathological diagnosis of Creutzfeldt-Jakob disease relies on the
AB
     immunohistochemical demonstration of the proteinase-K resistant form of
           ***prion*** protein (PrPres) in the brain tissue. The
     antigenicity of PrPres is strongly reduced by the formalin solution widely
     used to fix the tissue, thus the PrPres immunoreactivity is inconsistently
     detectable in formalin-fixed tissue. A better PrPres immunostaining can
     be obtained by using Carnoy's fixing solution, which is composed of
     ethanol, chloroform and acetic acid (6:3:1). PrPres can easily be
     extracted from Carnoy's-fixed, paraplast-embedded tissue. Accordingly,
     Carnoy's-fixed tissue can prior to immunolabeling be subjected to
     proteinase K and ***guanidine***
                                            ***thiocyanate*** , which
     respectively eliminate the normal cellular form of ***prion***
     and promote protein denaturation. In comparison with the best protocols
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for formalin-fixed tissue (i.e.-hydrolytic autoclaving or autoclaving in

distilled water followed by formic acid and \*\*\*guanidine\*\*\*

\*\*\*thiocyanate\*\*\* ), PrPres immunostaining carried out on sections cut
from Carnoy's-fixed, paraplast-embedded tissue blocks and subjected to
proteinase K and \*\*\*guanidine\*\*\* \*\*\*thiocyanate\*\*\*, proved more
successful to detect and map both diffuse and focal PrPres
immunoreactivity, and to correlate the immunoreactivity pattern with MV
polymorphism at PRNP codon 129 and PrPres banding and glycosylation
pattern revealed by Western blot.

- L16 ANSWER 28 OF 47 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 5
- AN 2000:538380 CAPLUS
- DN 134:82972
- TI PrP immunohistochemistry: different protocols, including a procedure for long formalin fixation, and a proposed schematic classification for deposits in sporadic Creutzfeldt-Jakob disease
- AU Privat, Nicolas; Sazdovitch, Veronique; Seilhean, Danielle; Laplanche, Jean-Louis; Hauw, Jean-Jacques
- CS Raymond Escourolle Neuropathology Laboratory, Paris VI University, Paris, 75651, Fr.
- SO Microscopy Research and Technique (2000), 50(1), 26-31 CODEN: MRTEEO; ISSN: 1059-910X
- PB Wiley-Liss, Inc.
- DT Journal
- LA English
- The use of immunohistochem. on formalin-fixed and paraffin-embedded tissue AB has greatly improved the neuropathol. diagnosis of Creutzfeldt-Jakob disease and the other subacute spongiform encephalopathies in human and animals. Two pitfalls of this technique, however, currently exist: low sensitivity after long formalin fixation and difficulties in interpreting some images. Here we review the protocols currently in use for the pretreatment of sections allowing PrP detection by immunohistochem. addn., a technique useful after long formalin fixation is reported: enzymic digestion with proteinase K (24.degree.C, 1/100 for 8 min) was employed in addn. to the usual autoclaving (121.degree.C for 10 min) followed by formic acid (99% for 5 min) and 4M \*\*\*guanidine\*\*\* \*\*\*thiocyanate\*\*\* (4.degree.C for 2 h). This allowed a substantial increase in the sensitivity of 3F4 immunohistochem. on paraffin-embedded tissue, esp. after prolonged formalin fixation. In addn., we suggest a simple method for classification of PrP immunolabelling in sporadic Creutzfeldt-Jakob disease that would allow easy comparisons.
- RE.CNT 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L16 ANSWER 29 OF 47 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
- AN 2000:271928 BIOSIS
- DN PREV200000271928
- TI A rapid method for PCR detection of bovine materials in animal feedstuffs.
- AU Wang, R.-F. [Reprint author]; Myers, M. J.; Campbell, W.; Cao, W.-W.; Paine, D.; Cerniglia, E.
- CS Microbiology Division, National Center for Toxicological Research, US Food and Drug Administration (FDA), Jefferson, AR, 72079, USA
- SO Molecular and Cellular Probes, (Feb., 2000) Vol. 14, No. 1, pp. 1-5. print.
  ISSN: 0890-8508.
- DT Article
- LA English
- ED Entered STN: 30 Jun 2000 Last Updated on STN: 5 Jan 2002
- AB Rapid identification of bovine materials in animal feedstuffs is essential for effective control of a potential source of bovine spongiform encephalopathy. We have developed a rapid method for the detection of the presence of bovine materials in animal feeds. Animal feed samples were prepared by a Chelex-100 treatment method, then subjected to polymerase chain reaction (PCR) detection. The assay can be completed in 2 h including 30 min for sample preparation, 35-65 min for PCR cycling and 30 min for gel electrophoresis. This method is not only rapid, simple and consistent, but also avoids a hazardous waste disposal issue associated with a previously described \*\*\*guanidine\*\*\* \*\*\*thiocyanate\*\*\* (GuSCN) extraction-PCR method.

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L16 ANSWER 30 OF 47 CAPLUS COPYRIGHT 2004 ACS on STN
AN
    1999:97206 CAPLUS
DN
    130:206996
     Concentration and detection of pathogenic ***prion*** proteins by
TI
    Shinagawa, Shinichi; Horiuchi, Motohiro
TN
PA Sangi Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 18 pp.
     CODEN: JKXXAF
рΤ
    Patent
LA
    Japanese
FAN.CNT 1
                        KIND DATE
                                           APPLICATION NO.
                                                                    DATE
     PATENT NO.
                         ----
                                -----
                                             _____
                                                                    -----
                        A2
PI JP 11032795
                                19990209
                                          JP 1997-193801
                                                                    19970718
   I JP 1997-193801 19970718

Pathogenic ***prion*** proteins in substances derived from animal
PRAI JP 1997-193801
     tissues are detected by ELISA involving the steps of (1) homogenizing the
     substances with surfactants and enzymes, (2) degrading the homogenates
     with degrading enzymes, (3) concg. the ***prion*** proteins from the
     homogenates, (4) dissolving the concs. in solvents, (5) adsorbing the
       ***prion*** proteins in the solns. on surfaces, and (6) coloring the
***prion*** proteins adsorbed. N-dodecyl-N,N-dimethyl-3-amino-1-propane
     sulfonate or tert-octylphenoxypolyethoxyethanol may be used as the
     surfactants. The process, for concg. the ***prion*** proteins,
     involving the steps (1), (2), and (3) is also claimed. PrPsc in brain and
     spleen tissues of scrapie-infected mice was concd. and detected according
     to the method with high sensitivity.
L16 ANSWER 31 OF 47 USPATFULL on STN
ΑN
       1999:92643 USPATFULL
       Compositions and methods for stimulating amyloid removal in
ΤI
       amyloidogenic diseases using advanced glycosylation endproducts
IN
       Vitek, Michael P., East Norwich, NY, United States
       Cerami, Anthony, Shelter Island, NY, United States
       Bucala, Richard J., New York, NY, United States
       Ulrich, Peter C., Old Tappan, NJ, United States
       Vlassara, Helen, Shelter Island, NJ, United States
       Zhang, Xini, Jericho, NJ, United States
       The Picower Institute For Medical Research, Manhasset, NY, United States
PA
       (U.S. corporation)
       US 5935927
                               19990810
PΤ
       WO 9520979 19950810
       US 1996-501127
                               19960810 (8)
AΤ
       WO 1995-US1380
                               19950202
                               19960810 PCT 371 date
                               19960810 PCT 102(e) date
       Continuation-in-part of Ser. No. US 1994-311768, filed on 23 Sep 1994,
RLI
       now abandoned which is a continuation-in-part of Ser. No. US
       1994-191579, filed on 3 Feb 1994, now abandoned
DT
       Utility
       Granted
EXNAM Primary Examiner: Duffy, Patricia A.
LREP
       Klauber & Jackson
CLMN Number of Claims: 9
ECL
       Exemplary Claim: 1
DRWN
       12 Drawing Figure(s); 8 Drawing Page(s)
LN.CNT 2154
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The present invention relates generally to methods and compositions for
AB
       treating amyloidogenic diseases such as Alzheimer's disease and the
       development of type II diabetes, in which deposition of amyloid in
       organs such as the brain and pancreas interfere with neurological
       function and insulin release, respectively. The methods and compositions
       are directed toward increasing the activity of scavenger cells within
       the body at recognizing and removing amyloid deposits from affected
       tissues and organs. Scavenger cells may be targeted to amyloid deposits
       by means of spontaneously-occurring chemical modifications called
       advanced glycosylation endproducts (AGEs). Compositions are described
       which increase scavenger cell activity towards AGE-modified amyloid.
       Amyloid removal may also be enhanced by increasing AGE levels in amyloid
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deposits within the body by administering AGE-modified amyloid targeting agents, which after becoming situated at sites containing amyloid, subsequently attract scavenger cells to degrade attendant amyloid. These methods and associated compositions result in a decrease in the extent of amyloid deposits in tissues, reducing the attendant pathology.

- L16 ANSWER 32 OF 47 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN DUPLICATE 6
- AN 2000:830 BIOSIS
- DN PREV20000000830
- TI Detection of bovine spongiform encephalopathy-specific PrPSc by treatment with heat and \*\*\*guanidine\*\*\* \*\*\*thiocyanate\*\*\* .
- AU Meyer, Rudolf K. [Reprint author]; Oesch, Bruno; Fatzer, Rosmarie; Zurbriggen, Andreas; Vandevelde, Marc
- CS Institute of Animal Neurology, University of Bern, Bremgartenstrasse 109a, CH-3012, Bern, Switzerland
- SO Journal of Virology, (Nov., 1999) Vol. 73, No. 11, pp. 9386-9392. print. CODEN: JOVIAM. ISSN: 0022-538X.
- DT Article
- LA English
- ED Entered STN: 23 Dec 1999
  Last Updated on STN: 31 Dec 2001
- AB The conversion of a ubiquitous cellular protein (PrPC), an isoform of the

  \*\*\*prion\*\*\* protein (PrP), to the pathology-associated isoform PrPSc is
  one of the hallmarks of transmissible spongiform encephalopathies such as
  bovine spongiform encephalopathy (BSE). Accumulation of PrPSc has been
  used to diagnose BSE. Here we describe a quantitative enzyme-linked
  immunosorbent assay (ELISA) that involves antibodies against epitopes
  within the protease-resistant core of the PrP molecule to measure the
  amount of PrP in brain tissues from animals with BSE and normal controls.
  In native tissue preparations, little difference was found between the two
  groups. However, following treatment of the tissue with heat and

\*\*\*guanidine\*\*\* \*\*\*thiocyanate\*\*\* (Gh treatment), the ELISA discriminated BSE-specific PrPSc from PrPC in bovine brain homogenates. PrPSc was identified by Western blot, centrifugation, and protease digestion experiments. It was thought that folding or complexing of PrPSc is most probably rev ersed by the Gh treatment, making hidden antigenic sites accessible. The digestion experiments also showed that protease-resistant PrP in BSE is more difficult to detect than that in hamster scrapie. While the concentration of PrPC in cattle is similar to that in hamsters, PrPSc sparse in comparison. The detection of PrPSc by a simple physicochemical treatment without the need for protease digestion, as described in this study, could be applied to develop a diagnostic assay to screen large numbers of samples.

- L16 ANSWER 33 OF 47 EMBASE COPYRIGHT 2004 ELSEVIER INC. ALL RIGHTS RESERVED.

  On STN DUPLICATE 7
- AN 1999250855 EMBASE
- TI [Safety measures in handling patients and laboratory samples infected with Creutzfeldt-Jakob disease].

  VOORZORGSMAATREGELEN BIJ OMGANG MET PATIENTEN EN LABORATORIUMMONSTERS
  BESMET MET DE ZIEKTE VAN CREUTZFELDT-JAKOB.
- AU Van Everbroeck B.; Pals P.; Cras P.
- CS B. Van Everbroeck, Universitaire Instelling Antwerpen, Born Bunge Stichting, Laboratorium Neurobiologie, Universiteitsplein 1, 2610 Wilrijk, Belgium
- SO Nederlands Tijdschrift voor Geneeskunde, (17 Jul 1999) 143/29 (1511-1514). Refs: 24 ISSN: 0028-2162 CODEN: NETJAN
- ISSN: 0028-2162
- CY Netherlands
  DT Journal; Article
- FS 035 Occupational Health and Industrial Medicine
- LA Dutch
- SL English; Dutch
- Creutzfeldt-Jakob disease (CLD) is a transmissible subacute spongiform encephalopathy that invariably leads to death. The presumed causative agent, the \*\*\*prion\*\*\* protein, is highly resistant to inactivation and has a long incubation period. Physical contact with CID patients (as in clinical care) entails no risk of transmission. During procedures such as lumbar puncture where contact with infected material is possible, precautions are necessary. Precautions are: the use of gloves, maximal

protection of people who come in contact with contaminated tissue (e.g. pathologist and histological laboratory worker) and transportation of samples in a closed and labelled container. - For laboratory research the tissue must be submerged in 92-98% formic acid for 1 hour. - All used materials and instruments must be decontaminated properly, using for instance NaOH, NaClO, \*\*\*guanidine\*\*\* \*\*\*thiocyanate\*\*\* or steam autoclaving. - If adequate precautions are taken contact with contaminated materials can be safe.

- L16 ANSWER 34 OF 47 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on DUPLICATE 8
- AN 2000:37694 BIOSIS
- DN PREV200000037694
- Antigen retrieval in \*\*\*prion\*\*\* protein immunohistochemistry. TТ
- Van Everbroeck, Bart; Pals, Philippe; Martin, Jean-Jacques; Cras, Patrick [Reprint author]
- CS Born Bunge Foundation, Laboratory of Neurobiology, University of Antwerp, Universiteitsplein 1, B-2610, Wilrijk, Belgium
- SO Journal of Histochemistry and Cytochemistry, (Nov., 1999) Vol. 47, No. 11, pp. 1465-1470. print. CODEN: JHCYAS. ISSN: 0022-1554.
- DT Article
- LΑ English
- Entered STN: 19 Jan 2000
  - Last Updated on STN: 31 Dec 2001
- Transmissible spongiform encephalopathies are a group of neurodegenerative diseases occurring in both humans and animals and are most likely caused by \*\*\*prions\*\*\* . Neuropathological confirmation of the clinical diagnosis has been a problem because of the difficulty in epitope retrieval from formalin-fixed, paraffin-embedded brain specimens. Many different protocols for the detection of \*\*\*prions\*\*\* in brain tissue have been used. Thus far, picric and/or formic acid, steam autoclaving at 121C of sections, microwave treatment, and 4 M \*\*\*guanidine\*\*\*
  - \*\*\*thiocyanate\*\*\* treatment have been suggested. The objective of our experiment was to obtain the standard pretreatment(s) resulting in optimal immunostaining. In the experiment, successive tissue slides of brain specimens of several Creutzfeldt-Jakob disease and control patients were stained using different combinations of pretreatments. Using densitometric analysis, several well-defined locations per section were examined and \*\*\*prion\*\*\* immunostaining was quantified. The results showed that autoclaving is necessary for antigen retrieval and cannot be substituted by microwave treatment. The best results were obtained when the following combination was used in the specified order: 15 min saturated picric acid, 10 min steam autoclaving at 121C, 5 min 88% formic acid, and 2 hr 4 M \*\*\*guanidine\*\*\* \*\*\*thiocyanate\*\*\*
- L16 ANSWER 35 OF 47 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN DUPLICATE 9
- AN 1998:130434 BIOSIS
- DN PREV199800130434
- TI The anti- \*\*\*prion\*\*\* activity of congo red: Putative mechanism.
- Caspi, Sigal; Halimi, Michele; Yanai, Anat; Sasson, Shmuel Ben; ΑU Taraboulos, Albert; Gabizon, Ruth [Reprint author]
- Dep. Neurol., Hadassah Univ. Hosp., Jerusalem 91120, Israel CS
- Journal of Biological Chemistry, (Feb. 6, 1998) Vol. 273, No. 6, pp. 3484-3489. print. CODEN: JBCHA3. ISSN: 0021-9258.
  - Article
- English LΑ

ידת

- Entered STN: 20 Mar 1998 Last Updated on STN: 20 Mar 1998
- PrPSc, an abnormal conformational isoform of the normal \*\*\*prion\*\*\* protein, PrPC, is the only known component of the \*\*\*prion\*\*\* , a proteinacious agent that causes fatal neurodegenerative disorders in humans and other animals. The hallmark properties of PrPSc are its insolubility in nondenaturing detergents and its resistance to digestion by proteases. Anions such as Congo red (CR) have been shown to reduce the accumulation of PrPSc in a neuroblastoma cell line permanently infected with \*\*\*prions\*\*\* as well as to delay disease onset in rodents when administrated prophylactically. The mechanism by which such anti-\*\*\*prion\*\*\* agents operate is unknown. We show here that in vitro

incubation with CR renders native PrPSc resistant to denaturation by boiling SDS. This resulted from PrPSc conformation, since neither the properties of PrPC nor those of predenatured PrPSc were changed by the addition of CR. CR-PrPSc could only be denatured by the. addition of acidic 3 m \*\*\*guanidine\*\*\* \*\*\*thiocyanate\*\*\*. Since in vitro conversion experiments have suggested that partial denaturation may be required for PrPSc to serve as template in the PrPC fwdarw PrPSc conversion, we propose that CR inhibits \*\*\*prion\*\*\* propogation by overstabilizing the conformation of PrPSc molecules.

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overstabilizing the conformation of PrPSc molecules.
                        MEDLINE on STN
L16 ANSWER 36 OF 47
                   MEDLINE
    1998022906
    PubMed ID: 9356250
DN
    A conformational transition at the N terminus of the
                                                            ***prion***
ΤI
    protein features in formation of the scrapie isoform.
    Peretz D; Williamson R A; Matsunaga Y; Serban H; Pinilla C; Bastidas R B;
     Rozenshteyn R; James T L; Houghten R A; Cohen F E; Prusiner S B; Burton D
CS
    Department of Neurology, School of Pharmacy, University of California, San
    Francisco, CA 94143, USA.
    AG02132 (NIA)
    NS14069 (NINDS)
    NS22786 (NINDS)
    Journal of molecular biology, (1997 Oct 31) 273 (3) 614-22.
    Journal code: 2985088R. ISSN: 0022-2836.
CY
    ENGLAND: United Kingdom
DT
    Journal; Article; (JOURNAL ARTICLE)
LΑ
    English
    Priority Journals
EM
    199801
    Entered STN: 19980130
    Last Updated on STN: 19980130
     Entered Medline: 19980120
                                protein (PrPSc) is formed from the cellular
    The scrapie ***prion***
AB
     isoform (PrPC) by a post-translational process that involves a profound
     conformational change. Linear epitopes for recombinant antibody Fab
     fragments (Fabs) on PrPC and on the protease-resistant core of PrPSc,
     designated PrP 27-30, were identified using ELISA and immunoprecipitation.
     An epitope region at the C terminus was accessible in both PrPC and PrP
     27-30; in contrast, epitopes towards the N-terminal region (residues 90 to
     120) were accessible in PrPC but largely cryptic in PrP 27-30.
     Denaturation of PrP 27-30 exposed the epitopes of the N-terminal domain.
     We argue from our findings that the major conformational change underlying
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L16 ANSWER 37 OF 47 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN DUPLICATE 10

PrPSc formation occurs within the N-terminal segment of PrP 27-30.

- AN 1997:205726 BIOSIS
- DN PREV199799504929
- TI Sensitive enzyme-linked immunosorbent assay for detection of PrP-Sc in crude tissue extracts from scrapie-affected mice.
- AU Grathwohl, Kai-Uwe D.; Horiuchi, Motohiro; Ishiguro, Naotaka; Shinagawa, Morikazu [Reprint author]
- CS Dep. Vet. Public Health, Obihiro Univ. Agric. Vet. Med., W 2-11, Inada-cho, Obihiro, Hokkaido 080, Japan
- SO Journal of Virological Methods, (1997) Vol. 64, No. 2, pp. 205-216. CODEN: JVMEDH. ISSN: 0166-0934.
- DT Article
- LA English
- ED Entered STN: 12 May 1997 Last Updated on STN: 12 May 1997

Copyright 1997 Academic Press Limited.

AB An enzyme-linked immunosorbent assay (ELISA) was developed that detects PrP-SC in crude extracts from brain and spleen tissue of scrapie-affected mice with high sensitivity and specificity. Brain tissue was homogenized in 8% Zwittergent 3-12 and 0.5% Sarkosyl. The homogenate was treated with collagenase and DNase I and then subjected to proteinase K digestion. Precipitates containing PrP-SC were obtained by ultracentrifugation. Spleen tissue was homogenized in 4% Triton X-100 and 0.5% Sarkosyl, and the homogenate was treated firstly with collagenase and DNase I, and

secondly with proteinase K. PrP-SC was then extracted with 6.25% Sarkosyl and precipitated through salting-out with NaCl and by ultracentrifugation. When PrP-SC was dissolved in 3-4 M \*\*\*guanidine\*\*\* \*\*\*thiocyanate\*\*\* and adsorbed to microliter plates, strong and specific reactions to the formation of antigen-antibody complexes could be detected by ELISA. The sensitivity of PrP-SC-detection for this ELISA, as measured by serial dilution of scrapie material in tissue homogenates from uninfected animals, was equal or higher than that attained by Western blot. This ELISA is more rapid than Western blot and seems to be more suitable for screening large numbers of animals. It also has potential application for the diagnosis of the transmissible spongiform encephalopathies.

- L16 ANSWER 38 OF 47 LIFESCI COPYRIGHT 2004 CSA on STN DUPLICATE 11
- AN 97:59013 LIFESCI
- TI Decontamination of Creutzfeldt-Jakob disease and other transmissible agents
- AU Manuelidis, L.
- CS Yale Med. Sch., Sect. Neuropathology, 310 Cedar St., New Haven, CT 06510, USA
- SO J. NEUROVIROL., (1997) vol. 3, no. 1, pp. 62-65. ISSN: 1355-0284.
- DT Journal
- FS N3; V
- LA English
- SL English
- AB The bovine spongiform encephalopathy (BSE) epidemic in cows, and the recent BSE-linked human infections, present new public health problems. More rigorous measures are needed to prevent additional transmissions. Tissue from established but undiagnosed human infections can contaminate medical supplies and instruments. We tested \*\*\*guanidine\*\*\*
  - \*\*\*thiocyanate\*\*\* (GdnSCN) solutions and found them to be highly effective in disrupting the infectious agent, even in very complex tissues such as whole brain. It may be prudent now to use this reagent routinely in surgical and other relevant settings.
- L16 ANSWER 39 OF 47 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN DUPLICATE 12
- AN 1997:160635 BIOSIS
- DN PREV199799459838
- TI \*\*\*Prion\*\*\* protein immunocytochemistry UK five centre consensus report.
- AU Bell, J. E. [Reprint author]; Gentleman, S. M.; Ironside, J. W.; McCardle, L.; Lantos, P. L.; Doey, L.; Lowe, J.; Fergusson, J.; Luthert, P.; McQuaid, S.; Allen, I. V.
- CS Univ. Neuropathol. Unit, Western Gen. Hosp., Crewe Road, Edinburgh EH4
- SO Neuropathology and Applied Neurobiology, (1997) Vol. 23, No. 1, pp. 26-35. CODEN: NANEDL. ISSN: 0305-1846.
- DT Article
- LA English
- ED Entered STN: 15 Apr 1997 Last Updated on STN: 15 Apr 1997
- Creutzfeldt-Jakob disease (CJD) and other \*\*\*prion\*\*\* diseases are associated with the deposition of insoluble \*\*\*prion\*\*\* protein (PrP-CJD) in the central nervous system (CNS). Antibodies raised against PrP-CJD) also react with its precursor protein, a soluble form of PrP (PrP-C), which is widely distributed in the normal CNS. This crossreactivity has in the past raised doubts as to the specificity and diagnostic reliability of PrP immunolocalization, especially in familial cases which are atypical clinically and which lack characteristic pathology findings. Following an MRC-funded workshop which focused on this problem, a multicentre prospective study was set up to identify a reliable protocol for PrP-CJD immunocytochemistry. Five UK centres took part in this study and demonstrated consistent staining of plaques, vacuolar deposits in severe spongiform change, and perineuronal deposits using a variety of antibodies and enhancement procedures. A protocol using formic acid, \*\*\*guanidine\*\*\* \*\*\*thiocyanate\*\*\* , and hydrated autoclaving pre-treatment in conjunction with a monoclonal PrP-CJD antibody produced the clearest immunochemical results and is presented as the consensus UK recommendation for PrP-CJD immunocytochemical procedures.

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L16 ANSWER 40 OF 47 USPATFULL on STN
AΝ
        94:11236 USPATFULL
ΤI
       Method of treating the symptoms of Alzheimer's disease
IN
       Wagle, Sudhakar S., Mequon, WI, United States
       Steinbach, Thomas, Houston, TX, United States
       Lawyer, Carl H., Mequon, WI, United States
       Hermann, William J., Sealy, TX, United States
       Gawish, Ali A. S., Mequon, WI, United States
       Kremers-Urban Company, Mequon, WI, United States (U.S. corporation)
PΆ
ΡI
       US 5284664
                               19940208
ДΤ
                                19920205 (7)
       US 1992-835029
       Continuation-in-part of Ser. No. US 1991-803844, filed on 4 Dec 1991
RLI
       which is a continuation-in-part of Ser. No. US 1991-728267, filed on 11
       Jul 1991, now abandoned which is a continuation of Ser. No. US
       1988-228364, filed on 4 Aug 1988, now patented, Pat. No. US 5055296
DT
       Utility
FS
       Granted
EXNAM Primary Examiner: Robinson, Douglas W.; Assistant Examiner: Witz, Jean
LREP
       Tilton, Fallon, Lungmus & Chestnut
CLMN
       Number of Claims: 5
ECL
       Exemplary Claim: 1
DRWN
       4 Drawing Figure(s); 5 Drawing Page(s)
LN.CNT 729
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       A therapeutic method for treating Alzheimer's or related disease. The
       method comprises administering a therapeutically-effective amount of a
       mammalian liver extract, the extract being characterized by being heat
       stable, insoluble in acetone and soluble in water, peptide or peptide
       fragment selected from the groups consisting of Sequence Identification
       Numbers 1-9.
L16 ANSWER 41 OF 47 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on
     STN
                                                         DUPLICATE 13
AΝ
    1994:451350 BIOSIS
DN
     PREV199497464350
       ***Prion*** protein immunocytochemistry: Reliable protocols for the
     investigation of Creutzfeldt-Jakob disease.
    Hayward, P. A. R.; Bell, J. E.; Ironside, J. W. [Reprint author]
    CJD Surveillance Unit, Neuropathology Lab., Univ. Dep. Pathology, Western
CS
     General Hosp., Crewe Road, Edinburgh EH4 2XU, UK
    Neuropathology and Applied Neurobiology, (1994) Vol. 20, No. 4, pp.
    375-383.
    CODEN: NANEDL. ISSN: 0305-1846.
DТ
    Article
LΑ
    English
ED
    Entered STN: 24 Oct 1994
    Last Updated on STN: 24 Oct 1994
    Current criteria for the histological diagnosis of Creutzfeldt-Jakob
    disease (CJD) include features such as spongiform change, neuronal loss
    and reactive gliosis which are shared to a varying extent with other
    neurodegenerative disorders. Reliable visualization of ***prion*** protein (PrP) has substantial potential value in diagnostic practice and
    as a research tool, since accumulation of the disease-associated isoform
    of this protein is apparently specific for spongiform encephalopathies. A
    number of antisera against PrP have previously been employed in
    conjunction with a range of pre-treatments designed to optimize the
    specificity of immunostaining: such varied usage makes the comparison and
    interpretation of results difficult. This study was undertaken to
    identify optimal combinations of each of three PrP antisera and five
    pre-treatments designed to specifically demonstrate disease-specific PrP
    in a series of seven CJD cases, six cases of Alzheimer-type dementia and
    six non-demented control cases. Specific staining of amyloid plaques,
    spongiform neuropil, neurons and, occasionally, astrocytes was achieved in
    CJD cases. Alzheimer and control cases were unstained. Use of formic
                ***guanidine***
                                     ***thiocyanate*** , and hydrolytic
    autoclaving with IB3 and SP30 antisera proved most effective and can be
    recommended for future immunocytochemical studies. PrP
    immununocytochemistry revealed a greater extent of subcortical neural
    involvement than routine histological techniques in CJD: the relationship
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between classical neuropathology in CJD and PrP accumulation as revealed

by immunocytochemistry is not clear cut and requires further investigation. These findings may help to broaden our understanding of human spongiform encephalopathies, and have implications for diagnostic practices in neuropathology.

- L16 ANSWER 42 OF 47 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN DUPLICATE 14
- AN 1994:35631 BIOSIS
- DN PREV199497048631
- TI Absence of protease-resistant \*\*\*prion\*\*\* protein in dementia characterized by neuronal loss and status spongiosus.
- AU Pollanen, M. S.; Bergeron, C. [Reprint author]; Weyer, L.
- CS Cent. Res. Neurodegenerative Dis., Tanz Neurosci. Build., Room 121, Univ. Toronto, 6 Queen's Park Cres. West, Toronto, ON M5S 1A8, Canada
- SO Acta Neuropathologica, (1993) Vol. 86, No. 5, pp. 515-517. CODEN: ANPTAL. ISSN: 0001-6322.
- DT Article
- LA English
- ED Entered STN: 27 Jan 1994
- Last Updated on STN: 27 Jan 1994
- Dementia characterized by neuronal loss and status spongiosus (DNLS) is a AB non-Alzheimer degenerative process which is characterized by Pick-like lobar atrophy with neuronal depletion and gliosis of the cerebral cortex, corpus striatum, medial thalamus, and substantia nigra and the absence of neuronal inclusions. To further investigate the cause and pathogenesis of DNLS, we probed cerebral homogenates from three cases of DNLS for protease-resistant \*\*\*prion\*\*\* protein to determine if DNLS could be a variant of a human \*\*\*prion\*\*\* disease. Limited proteolysis of \*\*\*prion\*\*\* proteins and \*\*\*guanidine\*\*\* \*\*\*thiocyanate\*\*\* treatment of cortical homogenates was used to enrich potential abnormal \*\*\*prion\*\*\* protein immunoreactivity. Although protease-resistant \*\*\*prion\*\*\* protein was detected in a case of sporadic Creutzfeldt-Jakob disease no abnormal \*\*\*prion\*\*\* protein was found in the cases of DNLS. We conclude that DNLS is not a human \*\*\*prion\*\*\* disease and remains an important dementia of uncertain etiology.
- L16 ANSWER 43 OF 47 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN DUPLICATE 15
- AN 1992:120514 BIOSIS
- DN PREV199293066314; BA93:66314
- TI ULTRASTRUCTURAL LOCALIZATION OF SCRAPIE \*\*\*PRION\*\*\* PROTEINS IN CYTOPLASMIC VESICLES OF INFECTED CULTURED CELLS.
- AU MCKINLEY M P [Reprint author]; TARABOULOS A; KENAGA L; SERBAN D; STIEBER A; DEARMOND S J; PRUSINER S B; GONATAS N
- CS DEP NEUROLOGY, HSE-781, UNIV CALIFORNIA, SAN FRANCISCO, CA 94143-00518,
- SO Laboratory Investigation, (1991) Vol. 65, No. 6, pp. 622-630. CODEN: LAINAW. ISSN: 0023-6837.
- DT Article
- FS BA
- LA ENGLISH
- ED Entered STN: 1 Mar 1992
  - Last Updated on STN: 1 Mar 1992
- AB Infectious scrapie \*\*\*prions\*\*\* are composed largely, if not entirely, of an abnormal isoform of the \*\*\*prion\*\*\* protein (PrP) designated PrPSc. In scrapie-infected mouse neuroblastoma (ScN2a) and hamster brain (ScHaB) cells, PrPSc accumulates primarily within the cell cytoplasm, whereas cellular PrP (PrPC) is anchored to the external surface of the plasma membrane by a glycoinositol phospholipid moiety. To determine the subcellular localization of PrPSc, scrapie-infected cells were grown to apprx. 75% confluency, fixed briefly, and then incubated with
  - \*\*\*guanidine\*\*\* \*\*\*thiocyanate\*\*\* before antibody staining and examination by electron microscopy. PrPSc immunoreactivity was enhanced by denaturation with guanidine isothiocyanate which also permeabilized cells (Taraboulos et al., J Cell Biol 110:2117, 1990). As judged both by deposition of immunoperoxidase reaction product (diaminobenzidine) and by presence of immunogold particles, PrPSc was identified in discrete vesicular foci and some large bodies in the cytoplasm of scrapie-infected cells. Some vesicles with PrPSc staining also contained myelin figures resembling those found in autophagic vacuoles forming secondary lysosomes. The presence of PrPSc in secondary lysosomes is inferred from

colocalization of guanidine isothiocyanate enhanced PrP immunoreactivity and acid phosphatase. Neither the diaminobenzidine reaction product nor immunogold particles were observed in association with the nucleus, endoplasmic reticulum, or Golgi stacks. Exposure of scrapie-infected cells to the brefeldin A dispersed the Golgi apparatus but did not alter the morphologic distribution of PrPSc, indicating that no detectable PrPSc was associated with Golgi stacks. It remains to be established whether secondary lysosomes are involved in the post-translational formation of PrPSc.

- L16 ANSWER 44 OF 47 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN DUPLICATE 16
- AN 1992:6142 BIOSIS
- DN PREV199293006142; BA93:6142
- TI IMMUNOREACTIVITY OF CEREBRAL AMYLOIDOSIS IS ENHANCED BY PROTEIN DENATURATION TREATMENTS.
- AU DOI-YI R [Reprint author]; KITAMOTO T; TATEISHI J
- CS DEP NEUROPATHOL, NEUROL INST, FAC MED, KYUSHU UNIV, 3-1-1 MAIDASHI, HIGASHIKU, FUKUOKA 812, JAPAN
- SO Acta Neuropathologica, (1991) Vol. 82, No. 4, pp. 260-265. CODEN: ANPTAL. ISSN: 0001-6322.
- DT Article
- FS BA
- LA ENGLISH
- ED Entered STN: 10 Dec 1991 Last Updated on STN: 6 Mar 1992
- AB We investigated paraffin-embedded brain sections from three patients with Gerstmann-Straussler syndrome and three patients with Alzheimer's disease or senile dementia of Alzheimer type using anti-human \*\*\*prion\*\*\* protein antisera and anti-beta./A4 protein antisera after protein
  - denaturation treatments. After incubation with \*\*\*guanidine\*\*\* \*\*\*thiocyanate\*\*\* , trichloroacetate, and phenol, the immunoreactivity of
    kuru plaques and senile plaques was enhanced to the same level as the
    formic acid treatment. These treatments revealed small compact amyloid
    deposits, amyloid deposits surrounding the plaque cores, and diffuse
    plaques. Most of these chemicals changed the congophilia of both
    amyloids. It is possible that these treatments denature amyloid fibril
    proteins and break down the structure of amyloid fibrils, thus revealing
    buried epitopes.
- L16 ANSWER 45 OF 47 SCISEARCH COPYRIGHT (c) 2004 The Thomson Corporation.
- AN 91:543273 SCISEARCH
- GA The Genuine Article (R) Number: GG487
- TI IMMUNOREACTIVITY OF CEREBRAL AMYLOIDOSIS IS ENHANCED BY PROTEIN DENATURATION TREATMENTS
- AU DOIYI R (Reprint); KITAMOTO T; TATEISHI J
- CS KYUSHU UNIV, DIV MED, INST NEUROL, DEPT NEUROPATHOL, 3-1-1 MAIDASHI, HIGASHI KU, FUKUOKA 812, JAPAN (Reprint)
- CYA JAPAN
- SO ACTA NEUROPATHOLOGICA, (1991) Vol. 82, No. 4, pp. 260-265.
- DT Article; Journal
- FS LIFE
- LA ENGLISH
- REC Reference Count: 32
- \*ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS\*
- AB We investigated paraffin-embedded brain sections from three patients with Gerstmann-Straussler syndrome and three patients with Alzheimer's disease or senile dementia of Alzheimer type using anti-human
  - \*\*\*prion\*\*\* protein antisera and anti-beta/A4 protein antisera after protein denaturation treatments. After incubation with \*\*\*guanidine\*\*\*
     \*\*\*thiocyanate\*\*\* , trichloroacetate, and phenol, the immunoreactivity of kuru plaques and senile plaques was enhanced to the same level as the formic acid treatment. These treatments revealed small compact amyloid deposits, amyloid deposits surrounding the plaque cores, and diffuse plaques. Most of these chemicals changed the congophilia of both amyloids. It is possible that these treatments denature amyloid fibril proteins and break down the structure of amyloid fibrils, thus revealing buried epitopes.

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AN 1991:614815 CAPLUS
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- DN 115:214815
- TI Practical methods for chemical inactivation of the Creutzfeldt-Jakob disease pathogen
- AU Tateishi, Jun; Tashma, Takatoshi; Kitamoto, Tetsuyuki
- CS Fac. Med., Kyushu Univ., Fukuoka, 812, Japan
- SO Microbiology and Immunology (1991), 35(2), 163-6 CODEN: MIIMDV; ISSN: 0385-5600
- DT Journal
- LA English
- AB Chem. inactivation of the pathogen of Creutzfeldt-Jakob disease (CJD) was examd. using the mouse-adapted CJD strain. A high concn. of formic acid, guanidine compds., trichloroacetate and phenol prevented CJD transmission. NaOH between 0.25 and 2 N lengthened the incubation periods. Na dodecyl sulfate (SDS) in a concn. between 1 and 3% did not alter incubation at room temp. but did completely block the transmission after boiling for 3 min in 3% SDS. This method is recommended for practical disinfection.
- L16 ANSWER 47 OF 47 CAPLUS COPYRIGHT 2004 ACS on STN
- AN 1987:65309 CAPLUS
- DN 106:65309
- TI Congophilia in cerebral amyloidosis is modified by inactivation procedures on slow transmissible pathogens
- AU Tashima, Takatoshi; Kitamoto, Tetsuyuki; Tateishi, Jun; Sato, Yuji
- CS Fac. Med., Kyushu Univ., Fukuoka, 812, Japan
- SO Brain Research (1986), 399(1), 80-6 CODEN: BRREAP; ISSN: 0006-8993
- DT Journal
- LA English
- AB Cerebral tissues with amyloid deposits were treated by various chems. which inactivated the agent of subacute spongiform encephalopathy (SSE). Congophilia (affinity for Congo red) in the amyloid plaques in cases of Creutzfeldt-Jakob disease (CJD) and Gerstmann-Straussler syndrome (GSS) correlated to the chem. inactivation profiles of SSE. After incubation with trichloroacetate, guanidine-SCN, guanidine-HCl, formic acid, or phenol with autoclaving, amyloid plaques in unfixed frozen sections of human brains with CJD or GSS lost their affinity for Congo red and green birefringence under polarized light. In formalin-fixed, paraffin-embedded tissue sections, amyloid plaques of CJD and GSS lost their affinity for Congo red after most of these treatments. On the other hand, senile plaques in aged patients with Alzheimer's disease and with senile dementia of the Alzheimer type did not lose affinity for Congo red after most of these treatments. Therefore, the amyloid deposits in the amyloid plaques differ from those in senile plaques. These methods facilitate differentiation of amyloid and senile plaques in formalin-fixed, paraffin-embedded tissues.

=> logoff y

STN INTERNATIONAL LOGOFF AT 17:24:46 ON 07 SEP 2004

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FILE 'HOME' ENTERED AT 17:25:08 ON 07 SEP 2004
=> file uspatfull
=> s prion? and (guanidine thiocyanate?)
         2960 PRION?
         26378 GUANIDINE
         25478 THIOCYANATE?
          1590 GUANIDINE THIOCYANATE?
                 (GUANIDINE (W) THIOCYANATE?)
            20 PRION? AND (GUANIDINE THIOCYANATE?)
=> d bib ab 1-
YOU HAVE REQUESTED DATA FROM 20 ANSWERS - CONTINUE? Y/(N):y
     ANSWER 1 OF 20 USPATFULL on STN
T<sub>1</sub>T
       2004:166069 USPATFULL
TT
       Sodium dodecyl sulfate compositions for inactivating
IN
       Prusiner, Stanley B., San Francisco, CA, UNITED STATES
       Supattapone, Surachai, Hanover, NH, UNITED STATES
                       A1 20040701
PΙ
       US 2004127559
ΑI
       US 2003-735454
                        A1 20031212 (10)
RLT
       Continuation of Ser. No. US 2002-56222, filed on 22 Jan 2002, GRANTED,
       Pat. No. US 6720355 Continuation-in-part of Ser. No. US 2001-904178,
       filed on 11 Jul 2001, GRANTED, Pat. No. US 6719988 Continuation-in-part
       of Ser. No. US 2000-699284, filed on 26 Oct 2000, ABANDONED
      Continuation-in-part of Ser. No. US 2000-494814, filed on 31 Jan 2000,
       GRANTED, Pat. No. US 6322802 Continuation-in-part of Ser. No. US
       1999-447456, filed on 22 Nov 1999, GRANTED, Pat. No. US 6331296
       Continuation-in-part of Ser. No. US 1999-322903, filed on 1 Jun 1999,
      GRANTED, Pat. No. US 6214366 Continuation-in-part of Ser. No. US
       1999-235372, filed on 20 Jan 1999, GRANTED, Pat. No. US 6221614
      Continuation-in-part of Ser. No. US 1998-151057, filed on 10 Sep 1998,
      ABANDONED Continuation-in-part of Ser. No. US 1998-26957, filed on 20
       Feb 1998, ABANDONED Continuation-in-part of Ser. No. US 1997-804536,
       filed on 21 Feb 1997, GRANTED, Pat. No. US 5891641
DT
      Utility
FS
      APPLICATION
LREP
      BOZICEVIC, FIELD & FRANCIS LLP, 200 MIDDLEFIELD RD, SUITE 200, MENLO
      PARK, CA, 94025
CLMN
      Number of Claims: 41
ECL
      Exemplary Claim: 1
DRWN
      12 Drawing Page(s)
LN.CNT 3476
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
      An antiseptic composition useful in destroying the infectivity of
      infectious proteins such as ***prions*** is disclosed. The
      antiseptic composition is preferably maintained at either a low pH of
      4.0 or less or a high pH of 10.0 or more either of which allows for an
       environment under which the active component (which is preferably sodium
      dodecyl sulfate) destroys infectivity. The composition may be added to
      blood, blood products, collagen, tissues and organs prior to
      transplantation. The composition also may be added to livestock feed to
      denature any ***prions*** in the livestock. Methods of denaturing
       infectious proteins are also disclosed which method can use but do not
      require higher temperatures and long period of exposure.
    ANSWER 2 OF 20 USPATFULL on STN 2004:166068 USPATFULL
T.1
AN
TI
      Sodium dodecyl sulfate compositions for inactivating
                                                            ***prions***
IN
      Prusiner, Stanley B., San Francisco, CA, UNITED STATES
      Supattapone, Surachai, Hanover, NH, UNITED STATES
PA
      The Regents of the University of California (U.S. corporation)
ΡI
      US 2004127558
                         A1 20040701
AΙ
      US 2003-735140
                         A1
                             20031212 (10)
RLI
      Continuation of Ser. No. US 2002-56222, filed on 22 Jan 2002, GRANTED,
      Pat. No. US 6720355 Continuation-in-part of Ser. No. US 2001-904178,
      filed on 11 Jul 2001, GRANTED, Pat. No. US 6719988 Continuation-in-part
      of Ser. No. US 2000-699284, filed on 26 Oct 2000, ABANDONED
      Continuation-in-part of Ser. No. US 2000-494814, filed on 31 Jan 2000,
      GRANTED, Pat. No. US 6322802 Continuation-in-part of Ser. No. US
      1999-447456, filed on 22 Nov 1999, GRANTED, Pat. No. US 6331296
      Continuation-in-part of Ser. No. US 1999-322903, filed on 1 Jun 1999,
      GRANTED, Pat. No. US 6214366 Continuation-in-part of Ser. No. US
```

1999-235372, filed on 20 Jan 1999, GRANTED, Pat. No. US 6221614 Continuation-in-part of Ser. No. US 1998-151057, filed on 10 Sep 1998, ABANDONED Continuation-in-part of Ser. No. US 1998-26957, filed on 20 Feb 1998, ABANDONED Continuation-in-part of Ser. No. US 1997-804536, filed on 21 Feb 1997, GRANTED, Pat. No. US 5891641 DT Utility FS APPLICATION LREP BOZICEVIC, FIELD & FRANCIS LLP, 200 MIDDLEFIELD RD, SUITE 200, MENLO PARK, CA, 94025 CLMN Number of Claims: 38 ECL Exemplary Claim: 1 DRWN 12 Drawing Page(s) LN.CNT 3467 CAS INDEXING IS AVAILABLE FOR THIS PATENT. An antiseptic composition useful in destroying the infectivity of infectious proteins such as \*\*\*prions\*\*\* is disclosed. The antiseptic composition is preferably maintained at either a low pH of 4.0 or less or a high pH of 10.0 or more either of which allows for an environment under which the active component (which is preferably sodium dodecyl sulfate) destroys infectivity. The composition may be added to blood, blood products, collagen, tissues and organs prior to transplantation. The composition also may be added to livestock feed to denature any \*\*\*prions\*\*\* in the livestock. Methods of denaturing infectious proteins are also disclosed which method can use but do not require higher temperatures and long period of exposure. ANSWER 3 OF 20 USPATFULL on STN Ll AN 2004:158591 USPATFULL ΤI Method of preparing a standard diagnostic gene transcript pattern IN Sharma, Praveen, Oslo, NORWAY Lonneborg, Anders, Aas, NORWAY DIAGENIC AS (non-U.S. corporation) PΑ A1 20040624 A1 20031205 ΡI US 2004121390 ДΤ US 2003-727576 A1 20031205 (10) Division of Ser. No. US 1999-429003, filed on 29 Oct 1999, GRANTED, Pat. RLI No. US 6720138 Continuation of Ser. No. WO 1998-GB1261, filed on 30 Apr 1998, UNKNOWN PRAI NO 1997-2006 19970430 DT Utility FS APPLICATION SUGHRUE MION, PLLC, 2100 Pennsylvania Avenue, N.W., Washington, DC, LREP 20037-3213 CLMN Number of Claims: 17 ECL Exemplary Claim: 1 DRWN 3 Drawing Page(s) LN.CNT 1269 CAS INDEXING IS AVAILABLE FOR THIS PATENT. A method for preparing a gene transcript pattern probe kit characteristic of a disease or condition or a stage thereof in a prokaryotic or eukaryotic organism using mRNA which is differentially expressed in the disease or condition or stage as probes, methods of diagnosis using the method and kits for performing the same are disclosed. T.1 ANSWER 4 OF 20 USPATFULL on STN 2004:69606 USPATFULL AN TI Sodium dodecyl sulfate compositions for inactivating \*\*\*prions\*\*\* IN Prusiner, Stanley B., San Francisco, CA, UNITED STATES Supattapone, Surachai, Hanover, NH, UNITED STATES PΑ The Regents of the University of California (U.S. corporation) PΤ US 2004052833 Al 20040318 ΑI US 2003-641687 A1 20030814 (10) RLT Continuation of Ser. No. US 2002-56222, filed on 22 Jan 2002, PENDING Continuation-in-part of Ser. No. US 2001-904178, filed on 11 Jul 2001, PENDING Continuation-in-part of Ser. No. US 2000-699284, filed on 26 Oct 2000, PENDING Continuation-in-part of Ser. No. US 2000-494814, filed on 31 Jan 2000, GRANTED, Pat. No. US 6322802 Continuation-in-part of Ser. No. US 1999-447456, filed on 22 Nov 1999, GRANTED, Pat. No. US 6331296 Continuation-in-part of Ser. No. US 1999-322903, filed on 1 Jun 1999, GRANTED, Pat. No. US 6214366 Continuation-in-part of Ser. No. US 1999-235372, filed on 20 Jan 1999, GRANTED, Pat. No. US 6221614

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Continuation-in-part of Ser. No. US 1998-151057, filed on 10 Sep 1998,
       ABANDONED Continuation-in-part of Ser. No. US 1998-26957, filed on 20
       Feb 1998, ABANDONED Continuation-in-part of Ser. No. US 1997-804536,
        filed on 21 Feb 1997, GRANTED, Pat. No. US 5891641
DT
       Utility
FS
       APPLICATION
LREP
       BOZICEVIC, FIELD & FRANCIS LLP, 200 MIDDLEFIELD RD, SUITE 200, MENLO
       PARK, CA, 94025
CLMN
       Number of Claims: 38
       Exemplary Claim: 1
DRWN
       12 Drawing Page(s)
LN.CNT 3478
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       An antiseptic composition useful in destroying the infectivity of
       infectious proteins such as ***prions*** is disclosed. The
       antiseptic composition is preferably maintained at either a low pH of
       4.0 or less or a high pH of 10.0 or more either of which allows for an
       environment under which the active component (which is preferably sodium
       dodecyl sulfate) destroys infectivity. The composition may be added to
       blood, blood products, collagen, tissues and organs prior to
       transplantation. The composition also may be added to livestock feed to
       denature any ***prions*** in the livestock. Methods of denaturing
       infectious proteins are also disclosed which method can use but do not
       require higher temperatures and long period of exposure.
     ANSWER 5 OF 20 USPATFULL on STN 2003:232025 USPATFULL
L1
AN
       Ligands specific for an isoform of the ***prion*** protein
ΤI
TN
       James, William Siward, Oxford, UNITED KINGDOM
       Hope, James, Newbury, UNITED KINGDOM
       Tahiri-Alaoui, Abdessamad, Oxford, UNITED KINGDOM
PΙ
       US 2003162225
                       A1 20030828
AΙ
       US 2002-295798
                        A1 20021115 (10)
       Continuation of Ser. No. WO 2001-GB2228, filed on 18 May 2001, UNKNOWN
RLI
PRAT
       GB 2000-12054
                          20000518
DT
       Utility
FS
       APPLICATION
LREP
       GRAY CARY WARE & FREIDENRICH LLP, 4365 EXECUTIVE DRIVE, SUITE 1100, SAN
       DIEGO, CA, 92121-2133
CLMN
       Number of Claims: 10
ECL
       Exemplary Claim: 1
DRWN
      10 Drawing Page(s)
LN.CNT 1030
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
         ***Prion*** protein, PrP, ligands are provided, especially protease
       resistant and nuclease resistant ligands. Ligands selective for isoforms
       such as PrP.sup.SC can be prepared. In a related aspect, the PrP ligands
       are used in diagnostic tests for PrP. The ligands also have potential
       for a role in the development of therapeutic methods for treatment of
       TSEs.
L1
     ANSWER 6 OF 20 USPATFULL on STN
       2003:194526 USPATFULL
AN
ΤI
       Muscle sample prepared for ***prion***
                                                  assav
IN
       Prusiner, Stanley B., San Francisco, CA, UNITED STATES
       Bosque, Patrick, Denver, CO, UNITED STATES
                        A1 20030717
       US 2003134337
AΤ
       US 2002-211942
                          A1 20020802 (10)
PRAI
       US 2002-351525P
                          20020122 (60)
       US 2001-323903P
                           20010920 (60)
DТ
       Utility
FS
       APPLICATION
LREP
       BOZICEVIC, FIELD & FRANCIS LLP, 200 MIDDLEFIELD RD, SUITE 200, MENLO
       PARK, CA. 94025
CLMN
      Number of Claims: 33
ECL
       Exemplary Claim: 1
DRWN
      9 Drawing Page(s)
LN.CNT 1977
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
      A method of preparing a sample of muscle tissue and of assaying the
      prepared sample to determine the presence of ***prions*** in the
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sample is disclosed. The muscle tissue is homogenized and mixed with a complexing agent which forms a complex with a higher specific gravity than PrP.sup.Sc, the complexing agent or other components of the homogenate. Gravity is then used (e.g. ultra centrifugation) to concentrate the complex and the concentrate is assayed to detect \*\*\*prions\*\*\* . The muscle tissue is preferably extracted from a muscle or group of muscles such as hind limb muscle which have a higher or more preferably the highest concentration of \*\*\*prions\*\*\* as compared to other muscle in the mammal.

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ANSWER 7 OF 20 USPATFULL on STN
T.7
AN
       2003:173177 USPATFULL
TΙ
       Capture compounds, collections thereof and methods for analyzing the
       proteome and complex compositions
IN
       Koster, Hubert, La Jolla, CA, UNITED STATES
       Siddiqi, Suhaib, Oceanside, CA, UNITED STATES
       Little, Daniel P., Winchester, MA, UNITED STATES
PΤ
       US 2003119021
                          A1 20030626
ΑI
       US 2002-197954
                          A1 20020716 (10)
       US 2001-306019P
PRAT
                           20010716 (60)
       US 2001-314123P
                           20010821 (60)
       US 2002-363433P
                           20020311 (60)
DT
       Utility
FS
       APPLICATION
       STEPHANIE SEIDMAN, HELLER EHRMAN WHITE & MCAULIFFE LLP, 7th FL., 4350 LA
LREP
       JOLLA VILLAGE DRIVE, SAN DIEGO, CA, 92122-1246
CLMN
       Number of Claims: 125
ECL
       Exemplary Claim: 1
DRWN
       70 Drawing Page(s)
LN.CNT 6373
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       Capture compounds and collections thereof and methods using the
       compounds for the analysis of biomolecules are provided. In particular,
       collections, compounds and methods are provided for analyzing complex
       protein mixtures, such as the proteome. The compounds are
       multifunctional reagents that provide for the separation and isolation
       of complex protein mixtures. Automated systems for performing the
       methods also provided.
     ANSWER 8 OF 20 USPATFULL on STN
L1
AN
       2003:64747 USPATFULL
ΤI
       Method for detecting
                             ***prion***
                                           proteins in tissue samples
TN
       Aslamkhan, Abubakr, Durham, NC, UNITED STATES
       Higgins, Donald, Franklinton, NC, UNITED STATES
PΤ
       US 2003044868
                         A1
                               20030306
AΙ
       US 2001-924812
                         A1
                               20010808 (9)
DT
       Utility
FS
       APPLICATION
LREP
      PARADIGM GENETICS, INC, 108 ALEXANDER DRIVE, P O BOX 14528, RTP, NC,
       27709-4528
      Number of Claims: 13
CLMN
ECL
       Exemplary Claim: 1
      4 Drawing Page(s)
LN.CNT 778
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       Surprisingly, the present inventors have discovered that thermal
       denaturation of ***prion*** protein facilitates its detection by
       immunological methods. Accordingly, the present invention provides
       methods for the preparation and thermal denaturation of samples for
        ***prion*** detection, comprising: homogenizing a candidate sample and
      heating said sample in a buffer, preferably one with properties that aid
       stabilization of the denatured form of the protein. The methods
       described in this disclosure can be used in the detection of PrP.sup.Sc.
      Such detection is useful for the diagnosis of transmissible spongiform
       encephalopathies. This method can be used with immunoassays of various
       formats, including, but not limited to, dot blot and western blot
      assays, which utilize polyclonal antibodies, monoclonal antibodies,
      antibody fragments, receptors, natural and synthetic ligands and other
```

entities.

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AN
        2003:30296 USPATFULL
 TΤ
        Protein aggregation assays and uses thereof
        Kondejewski, Les, St. Lazare, CANADA
 IN
        Chakrabartty, Avijit, Vaughan, CANADA
        Qi, Xiao-Fei, Toronto, CANADA
Cashman, Neil, Toronto, CANADA
PΙ
        US 2003022243
                        A1 20030130
ΑI
        US 2002-176809
                          A1 20020620 (10)
PRAT
       US 2001-299849P
                            20010620 (60)
DT
       Utility
FS
       APPLICATION
LREP
       CLARK & ELBING LLP, 101 FEDERAL STREET, BOSTON, MA, 02110
CLMN
       Number of Claims: 115
ECL
       Exemplary Claim: 1
DRWN
       23 Drawing Page(s)
LN.CNT 2602
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       This invention features methods for identifying agents that modulate
AB
       protein aggregation or stabilize protein conformation. Exemplary methods
       include an in vitro aggregation assay, a native state stabilization
       assay, a cell-based screening assay, and an animal-based screening
       assay. These methods can be used to identify agents useful for the
       treatment of conformational diseases resulting from aggregation of a
       protein.
L1
     ANSWER 10 OF 20 USPATFULL on STN
AN
       2003:17028 USPATFULL
       Polymer conjugates of proteinases
TI
TN
       Sherman, Merry R., San Carlos, CA, UNITED STATES
       Martinez, Alexa L., San Jose, CA, UNITED STATES
       Bhaskaran, Shyam S., San Bruno, CA, UNITED STATES
       Williams, L. David, Fremont, CA, UNITED STATES
       Saifer, Mark G., San Carlos, CA, UNITED STATES
       French, John A., Santa Cruz, CA, UNITED STATES
PΤ
       US 2003012777
                        Al 20030116
AΙ
       US 2002-183607
                          A1
                               20020628 (10)
       Continuation-in-part of Ser. No. US 2002-103128, filed on 22 Mar 2002,
       PENDING Continuation-in-part of Ser. No. US 2001-894071, filed on 28 Jun
       2001, ABANDONED
DT
       Utility
FS
       APPLICATION
LREP
       STERNE, KESSLER, GOLDSTEIN & FOX PLLC, 1100 NEW YORK AVENUE, N.W., SUITE
       600, WASHINGTON, DC, 20005-3934
       Number of Claims: 143
CLMN
ECT.
       Exemplary Claim: 1
       18 Drawing Page(s)
DRWN
LN.CNT 2195
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       Methods are provided for the stabilization of proteinases by the
       covalent attachment of or admixture with water-soluble polymers. The
       resultant stabilized proteinases have increased stability under the
       harsh conditions used in industrial genomics, which permits their use in
       the extraction and isolation of nucleic acids and the identification of
       disease-related ***prion*** proteins at elevated temperatures in
       solutions containing chaotropic agents, such as sodium dodecyl sulfate,
       urea or guanidinium salts, conferring advantages for robotic
       applications.
L1
     ANSWER 11 OF 20 USPATFULL on STN
       2003:4268 USPATFULL
AN
       Sodium dodecyl sulfate compositions for inactivating
TI
                                                             ***prions***
IN
       Prusiner, Stanley B., San Francisco, CA, UNITED STATES
       Supattapone, Surachai, Hanover, NH, UNITED STATES
ΡI
       US 2003004312
                              20030102
                       A1
       US 6720355
                         B2
                              20040413
AΙ
       US 2002-56222
                         A1 20020122 (10)
       Continuation-in-part of Ser. No. US 2001-904178, filed on 11 Jul 2001,
RLI
       PENDING Continuation-in-part of Ser. No. US 2000-699284, filed on 26 Oct
       2000, PENDING Continuation-in-part of Ser. No. US 2000-494814, filed on
       31 Jan 2000, GRANTED, Pat. No. US 6322802 Continuation-in-part of Ser.
       No. US 1999-447456, filed on 22 Nov 1999, GRANTED, Pat. No. US 6331296
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Continuation-in-part of Ser. No. US 1999-322903, filed on 1 Jun 1999, GRANTED, Pat. No. US 6214366 Continuation-in-part of Ser. No. US 1999-235372, filed on 20 Jan 1999, GRANTED, Pat. No. US 6221614 Continuation-in-part of Ser. No. US 1998-151057, filed on 10 Sep 1998, ABANDONED Continuation-in-part of Ser. No. US 1998-26957, filed on 20 Feb 1998, ABANDONED Continuation-in-part of Ser. No. US 1997-804536, filed on 21 Feb 1997, GRANTED, Pat. No. US 5891641 Utility APPLICATION BOZICEVIC, FIELD & FRANCIS LLP, 200 MIDDLEFIELD RD, SUITE 200, MENLO LREP PARK, CA, 94025 CLMN Number of Claims: 38 ECL Exemplary Claim: 1 DRWN 12 Drawing Page(s) LN.CNT 3471 CAS INDEXING IS AVAILABLE FOR THIS PATENT. An antiseptic composition useful in destroying the infectivity of infectious proteins such as \*\*\*prions\*\*\* is disclosed. The antiseptic composition is preferably maintained at either a low pH of 4.0 or less or a high pH of 10.0 or more either of which allows for an environment under which the active component (which is preferably sodium dodecyl sulfate) destroys infectivity. The composition may be added to blood, blood products, collagen, tissues and organs prior to transplantation. The composition also may be added to livestock feed to denature any \*\*\*prions\*\*\* in the livestock. Methods of denaturing infectious proteins are also disclosed which method can use but do not require higher temperatures and long period of exposure. ANSWER 12 OF 20 USPATFULL on STN 2002:258862 USPATFULL Human endosulfine gene Roch, Jean-Marc, Waukegan, IL, UNITED STATES Scott, Victoria E.S., Evanston, IL, UNITED STATES Anderson, Kristi L., Grayslake, IL, UNITED STATES Sullivan, James P., Deerfield, IL, UNITED STATES US 2002142432 A1 20021003 US 2001-824178 A1 20010402 (9) Continuation of Ser. No. US 1997-779775, filed on 7 Jan 1997, ABANDONED Utility APPLICATION Steven F. Weinstock, Abbott Laboratories, Department 377 / AP6D-2, 100 LREP Abbott Park Road, Abbott Park, IL, 60064-6050 CLMN Number of Claims: 40 Exemplary Claim: 1 DRWN 8 Drawing Page(s) LN.CNT 2951 CAS INDEXING IS AVAILABLE FOR THIS PATENT. The present invention provides an isolated or purified polynucleotide that encodes human endosulfine polypeptide. Isoforms of human endosulfine are also disclosed. The invention also provides methods of making recombinant human endosulfine using the polynucleotides and host cells transformed with the polynucleotides. ANSWER 13 OF 20 USPATFULL on STN 2002:246898 USPATFULL Transgenic mice expressing human APP and TGF-.beta. demonstrate cerebrovascular amyloid deposits Mucke, Lennart, Foster City, CA, United States Wyss-Coray, Tony, Berkeley, CA, United States Masliah, Eliezer, Chula Vista, CA, United States The Regents of the University of California, Oakland, CA, United States (U.S. corporation) US 6455757 20020924 US 1999-262519 19990304 (9) Continuation-in-part of Ser. No. US 1997-947295, filed on 8 Oct 1997 Utility GRANTED EXNAM Primary Examiner: Crouch, Deborah LREP Francis, Carol L., Borden, Paula A., Bozicevic, Field & Francis, LLP Number of Claims: 14 CLMN Exemplary Claim: 1

DT

FS

L1

TT

PΙ

ΑI

RIT

DT

FS

ECL

Ll

AN

TI

IN

PΑ

PΤ

ΑI

RLI DT

FS

ECL

9 Drawing Figure(s); 6 Drawing Page(s) LN.CNT 1966 CAS INDEXING IS AVAILABLE FOR THIS PATENT. AB The present invention features non-human transgenic animal models for Alzheimer's disease (AD) and CAA, wherein the transgenic animal is characterized by 1) expression of bioactive transforming growth factor-.beta.1 (TGF-.beta.1) or 2) both expression of bioactive TGF-.beta.1 and expression of a human amyloid .beta. precursor protein (APP) gene product. The transgenic animals may be either homozygous or heterozygous for these alterations. Bigenic animals are further characterized by development of AD-associated and/or CAA-associated pathology within about two to three months of age, and at about twelve months of age are characterized by a reduced number of neuritic plaques relative to singly transgenic animals. The invention also features methods of screening for biologically active agents that facilitate reduction of .beta.-amyloid deposits in vivo and methods for facilitating reduction of formation of neuritic plaques in a subject susceptible to AD. 1.1 ANSWER 14 OF 20 USPATFULL on STN AN 2002:152685 USPATFULL TI Compositions and methods for advanced glycosylation endproduct-mediated modulation of amyloidosis IN Vitek, Michael P., 205 Park Knoll La., Apex, NC, United States 27502 Cerami, Anthony, Ram Island Dr., Shelter Island, NY, United States Bucala, Richard J., 504 E. 63rd St. Apt. 33-0, New York, NY, United States 10021 Ulrich, Peter C., 148 DeWolf Rd., Old Tappan, NJ, United States 07675 Vlassara, Helen, Ram Island Dr., Shelter Island, NY, United States 11964 Zhang, Xini, 150 Fairhaven Dr. Apt. D1, Jericho, NY, United States 117534) ÞТ US 6410598 20020625 AΤ US 1995-477364 19950607 (8) Continuation-in-part of Ser. No. US 1995-457169, filed on 1 Jun 1995 RLT Continuation-in-part of Ser. No. WO 1995-US1380, filed on 2 Feb 1995 Continuation-in-part of Ser. No. US 1994-311768, filed on 23 Sep 1994, now abandoned Continuation of Ser. No. US 1994-191579, filed on 3 Feb 1994, now abandoned DT Utility FS GRANTED EXNAM Primary Examiner: Duffy, Patricia A. CLMN Number of Claims: 5 ECL Exemplary Claim: 1 12 Drawing Figure(s); 8 Drawing Page(s) LN.CNT 2202 CAS INDEXING IS AVAILABLE FOR THIS PATENT. The present invention relates generally to the non-enzymatic glycosylation of amyloidogenic proteins and the consequent formation of advanced glycosylation endproducts (AGEs). It has been found that formation of AGE-amyloidogenic proteins can enhance amyloidosis. The invention further relates to compositions and methods for the prevention and treatment of amyloidosis associated with amyloid diseases, particularly neurodegenerative disease and Type II diabetes, and more particularly Alzheimer's disease. In a specific example, aggregation of an amyloidogenic peptide, .beta.AP, is enhanced by the glycosylation reaction of .beta.AP to form AGE-.beta.AP as defined herein. Accordingly, the invention extends to a method for modulating the in vivo aggregation of amyloid polypeptides and associated amyloidosis by controlling the formation and presence of AGE-amyloid polypeptide. A corresponding diagnostic utility comprises the measurement of the course and extent of amyloidosis by a measurement of the presence and amount of AGEs and particularly, AGE-amyloid. An assay is included that may use the AGE-amyloid polypeptide of the present invention to identify disease states characterized by the presence of AGE-amyloid. Additionally, such an assay can be utilized to monitor therapy and thus adjust a dosage

regimen for a given disease state characterized by the presence of

AGE-amyloid.

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2002:78206 USPATFULL
TI
       Antiseptic compositions for inactivating
                                                  ***prions***
IN
        Prusiner, Stanley B., San Francisco, CA, UNITED STATES
        Supattapone, Surachai, Hanover, NH, UNITED STATES
                       A1 20020411
PΙ
        US 2002041859
       US 6719988
                          B2
                               20040413
ΑI
       US 2001-904178
                         Al 20010711 (9)
RLI
       Continuation-in-part of Ser. No. US 2000-699284, filed on 26 Oct 2000,
       PENDING Continuation-in-part of Ser. No. US 2000-494814, filed on 31 Jan
       2000, GRANTED, Pat. No. US 6322802 Continuation-in-part of Ser. No. US
       1999-447456, filed on 22 Nov 1999, PENDING Continuation-in-part of Ser.
       No. US 1999-322903, filed on 1 Jun 1999, GRANTED, Pat. No. US 6214366
       Continuation-in-part of Ser. No. US 1999-235372, filed on 20 Jan 1999,
       GRANTED, Pat. No. US 6221614 Continuation-in-part of Ser. No. US
       1998-151057, filed on 10 Sep 1998, ABANDONED Continuation-in-part of
       Ser. No. US 1998-26957, filed on 20 Feb 1998, ABANDONED
       Continuation-in-part of Ser. No. US 1997-804536, filed on 21 Feb 1997,
       GRANTED, Pat. No. US 5891641
DT
       Utility
FS
       APPLICATION
LREP
       Karl Bozicevic, Bozicevic, Field and Francis LLP, Suite 200, 200
       Middlefield Road, Menlo Park, CA, 94025
       Number of Claims: 22
ECL
       Exemplary Claim: 1
DRWN
       12 Drawing Page(s)
LN.CNT 3354
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       An antiseptic composition useful in destroying the infectivity of
       infectious proteins such as ***prions*** is disclosed. The
       antiseptic composition is preferably maintained at a pH of 4.0 or less
       which allows for an environment under which the active component
       destroys infectivity. The composition may be added to blood, blood
       products, collagen, tissues and organs prior to transplantation. The
       composition also may be added to livestock feed to denature any
         ***prions*** in the livestock. Methods of denaturing infectious
       proteins are also disclosed.
     ANSWER 16 OF 20 USPATFULL on STN
L1
AN
       2002:37505 USPATFULL
TI
       METHOD OF PREPARING A STANDARD DIAGNOSTIC GENE TRANSCRIPT PATTERN
IN
       SHARMA, PRAVEEN, OSLO, NORWAY
       LONNEBORG, ANDERS, AAS, NORWAY
ΡT
       US 2002022222
                      A1 20020221
                         B2 20040410
A1 19991029 (9)
       US 6720138
ΑI
       US 1999-429003
                         A1
       Continuation of Ser. No. WO 1998-GB1261, filed on 30 Apr 1998, UNKNOWN
RLI
PRAI
      NO 1997-2006
                          19970430
DT
       Utility
FS
       APPLICATION
       SUGHRUE MION ZINN MACPEAK & SEAS PLLC, 2100 PENNSYLVANIA AVENUE NW,
LREP
       WASHINGTON, DC, 200373213
CLMN
      Number of Claims: 17
ECL
      Exemplary Claim: 1
DRWN
       3 Drawing Page(s)
LN.CNT 1238
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
      A method for preparing a gene transcript pattern probe kit
       characteristic of a disease or condition or a stage thereof in a
       prokaryotic or eukaryotic organism using mRNA which is differentially
       expressed in the disease or condition or stage as probes, methods of
       diagnosis using the method and kits for performing the same are
       disclosed.
     ANSWER 17 OF 20 USPATFULL on STN
1.1
AN
      2001:90277 USPATFULL
ΤI
       METHODS FOR IN VITRO SUSCEPTIBILITY TESTING OF CHLAMYDIA
IN
      STRATTON, CHARLES W, NASHVILLE, TN, United States
      MITCHELL, WILLIAM M, NASHVILLE, TN, United States
ΡI
      US 2001002421 A1 20010531
                         B2 20010710
A1 19980218 (9)
      US 6258532
ΑI
      US 1998-25176
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AN

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RLI
       Continuation-in-part of Ser. No. US 1997-911593, filed on 14 Aug 1997,
       ABANDONED
DT
       Utility
FS
       APPLICATION
LREP
       KAREN F. ELBING, CLARK AND ELBING, 176 FEDERAL STREET, BOSTON, MA, 02110
CLMN
       Number of Claims: 55
ECL
       Exemplary Claim: 1
DRWN
       No Drawings
LN.CNT 763
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       Methods for determining the susceptibility of intracellular pathogens,
       particularly Chlamydia, to single or combination of test agents are
       described. The methods can be used for in vitro or in vivo evaluation of
       agents that can be used as therapeutic agents in the
       treatment/eradication of pathogen infection in general or to target a
       specific infected organ. Assays which utilize nucleic amplification
       techniques (e.g., PCR) to determine effectiveness of the agent(s)
       evaluated are also described.
     ANSWER 18 OF 20 USPATFULL on STN
T.1
AN
       2001:8223 USPATFULL
ΤI
       Transgenic mouse model of alzheimer's disease and cerebral amyloid
       angiopathy
IN
       Mucke, Lennart, Foster City, CA, United States
       Wyss-Coray, Tony, Berkeley, CA, United States
       Masliah, Eliezer, Chula Vista, CA, United States
PA
       The Regents of the University of California, Oakland, CA, United States
       (U.S. corporation)
ΡI
       US 6175057
                          R1
                               20010116
       US 1997-947295
AΙ
                               19971008 (8)
       Utility
FS
       Granted
EXNAM Primary Examiner: Crouch, Deborah
LREP
       Francis, Carol L., Borden, Paula A.Bozicevic, Field & Francis LLP
       Number of Claims: 23
CLMN
ECL
       Exemplary Claim: 1
DRWN
       6 Drawing Figure(s); 5 Drawing Page(s)
LN.CNT 1697
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The present invention features non-human transgenic animal models for
       Alzheimer's disease (AD) and CAA, wherein the transgenic animal is
       characterized by 1) overexpression of bioactive transforming growth
       factor-.beta.1 (TGF-.beta.1) or 2) both overexpression of bioactive
       TGF-.beta.1 and expression of a human amyloid .beta. precursor protein
       (APP) gene product. The transgenic animals may be either homozygous or
       heterozygous for these alterations. Bigenic animals are further
       characterized by development of AD-associated and/or CAA-associated
       pathology within about two to three months of age.
     ANSWER 19 OF 20 USPATFULL on STN
L1
AN
       1999:92643 USPATFULL
TI
       Compositions and methods for stimulating amyloid removal in
       amyloidogenic diseases using advanced glycosylation endproducts
IN
       Vitek, Michael P., East Norwich, NY, United States
       Cerami, Anthony, Shelter Island, NY, United States
       Bucala, Richard J., New York, NY, United States
       Ulrich, Peter C., Old Tappan, NJ, United States
       Vlassara, Helen, Shelter Island, NJ, United States
       Zhang, Xini, Jericho, NJ, United States
PΑ
       The Picower Institute For Medical Research, Manhasset, NY, United States
       (U.S. corporation)
      US 5935927
ΡI
                               19990810
      WO 9520979 19950810
ΑI
      US 1996-501127
                               19960810 (8)
      WO 1995-US1380
                               19950202
                               19960810 PCT 371 date
                               19960810 PCT 102(e) date
      Continuation-in-part of Ser. No. US 1994-311768, filed on 23 Sep 1994,
RLI
      now abandoned which is a continuation-in-part of Ser. No. US
      1994-191579, filed on 3 Feb 1994, now abandoned
DТ
      Utility
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FS Granted EXNAM Primary Examiner: Duffy, Patricia A. Klauber & Jackson LREP CLMN Number of Claims: 9 ECL Exemplary Claim: 1 DRWN 12 Drawing Figure(s); 8 Drawing Page(s) LN.CNT 2154 CAS INDEXING IS AVAILABLE FOR THIS PATENT. The present invention relates generally to methods and compositions for treating amyloidogenic diseases such as Alzheimer's disease and the development of type II diabetes, in which deposition of amyloid in organs such as the brain and pancreas interfere with neurological function and insulin release, respectively. The methods and compositions are directed toward increasing the activity of scavenger cells within the body at recognizing and removing amyloid deposits from affected tissues and organs. Scavenger cells may be targeted to amyloid deposits by means of spontaneously-occurring chemical modifications called advanced glycosylation endproducts (AGEs). Compositions are described which increase scavenger cell activity towards AGE-modified amyloid. Amyloid removal may also be enhanced by increasing AGE levels in amyloid deposits within the body by administering AGE-modified amyloid targeting agents, which after becoming situated at sites containing amyloid, subsequently attract scavenger cells to degrade attendant amyloid. These methods and associated compositions result in a decrease in the extent of amyloid deposits in tissues, reducing the attendant pathology. ANSWER 20 OF 20 USPATFULL on STN Ь1 AN 94:11236 USPATFULL ΤI Method of treating the symptoms of Alzheimer's disease Wagle, Sudhakar S., Mequon, WI, United States Steinbach, Thomas, Houston, TX, United States TN Lawyer, Carl H., Mequon, WI, United States Hermann, William J., Sealy, TX, United States Gawish, Ali A. S., Mequon, WI, United States Kremers-Urban Company, Mequon, WI, United States (U.S. corporation) PΑ ΡI US 5284664 19940208 US 1992-835029 AΤ 19920205 (7) RLI Continuation-in-part of Ser. No. US 1991-803844, filed on 4 Dec 1991 which is a continuation-in-part of Ser. No. US 1991-728267, filed on 11 Jul 1991, now abandoned which is a continuation of Ser. No. US 1988-228364, filed on 4 Aug 1988, now patented, Pat. No. US 5055296 DT Utility FS Granted EXNAM Primary Examiner: Robinson, Douglas W.; Assistant Examiner: Witz, Jean LREP Tilton, Fallon, Lungmus & Chestnut CLMN Number of Claims: 5 ECL Exemplary Claim: 1 DRWN 4 Drawing Figure(s); 5 Drawing Page(s) LN.CNT 729 CAS INDEXING IS AVAILABLE FOR THIS PATENT. A therapeutic method for treating Alzheimer's or related disease. The method comprises administering a therapeutically-effective amount of a mammalian liver extract, the extract being characterized by being heat stable, insoluble in acetone and soluble in water, peptide or peptide

fragment selected from the groups consisting of Sequence Identification

Numbers 1-9.